Railways of Australia

NETWORK

Vol. 16 No. 1 February 1979 Price: 50 cents

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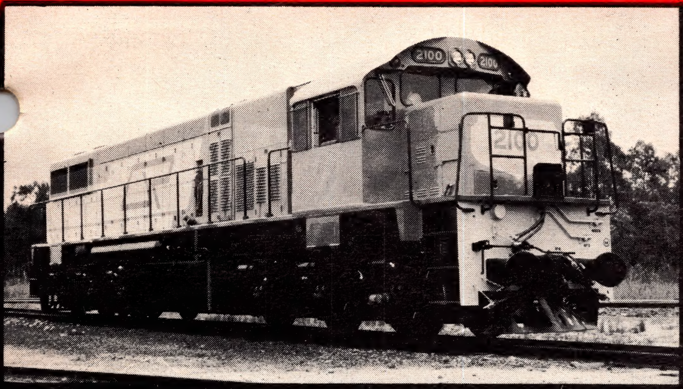
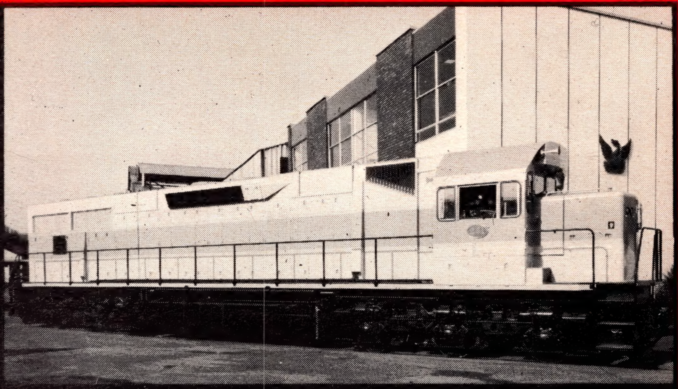


Q.R. Model GL26C 2200/2000 HP



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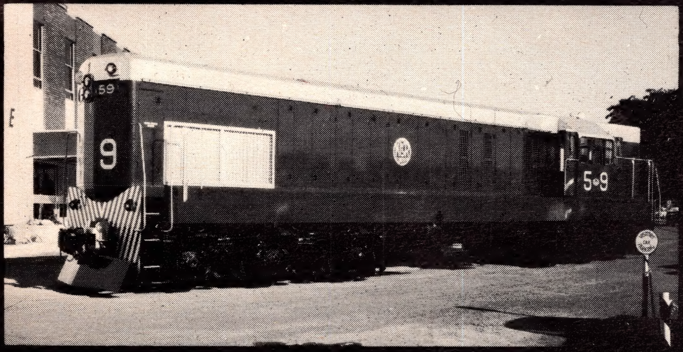

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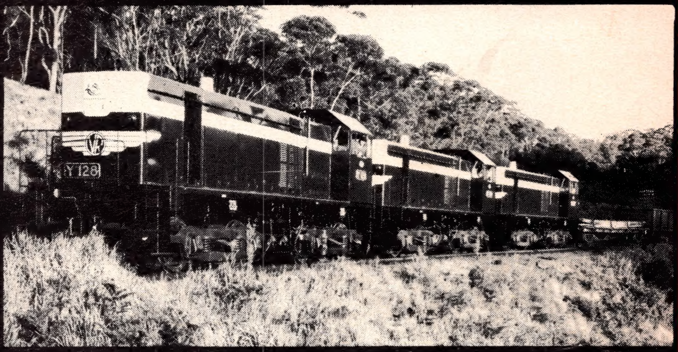

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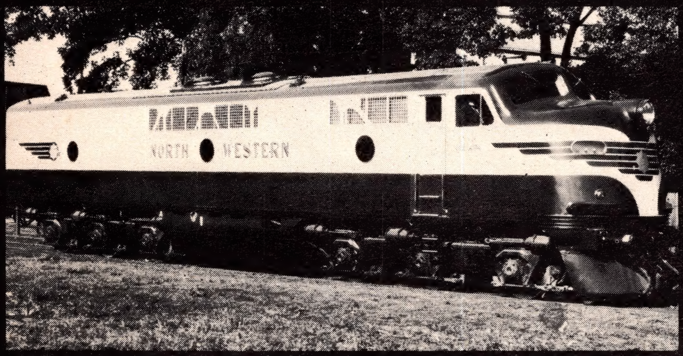

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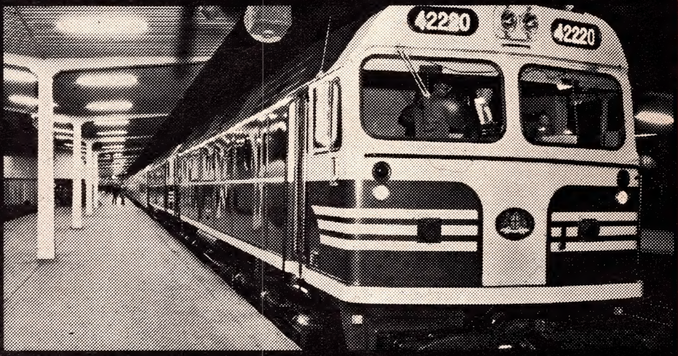

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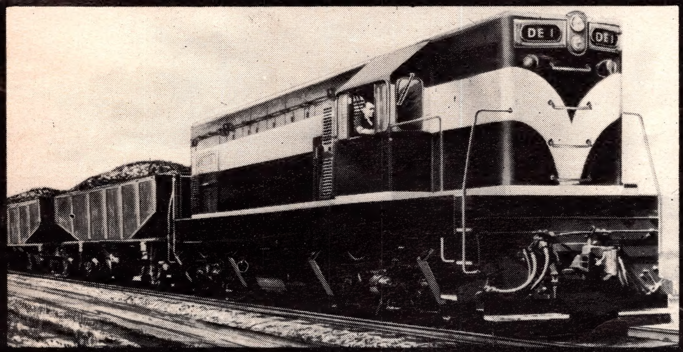

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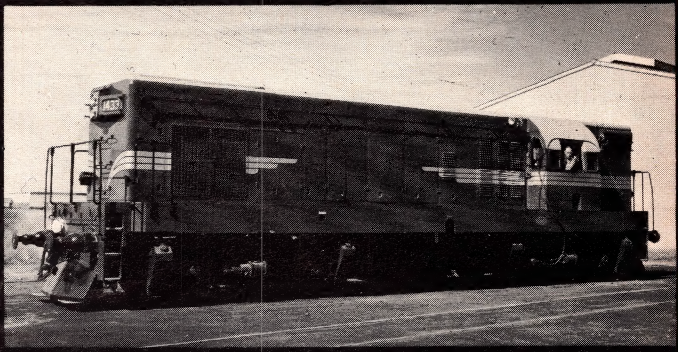

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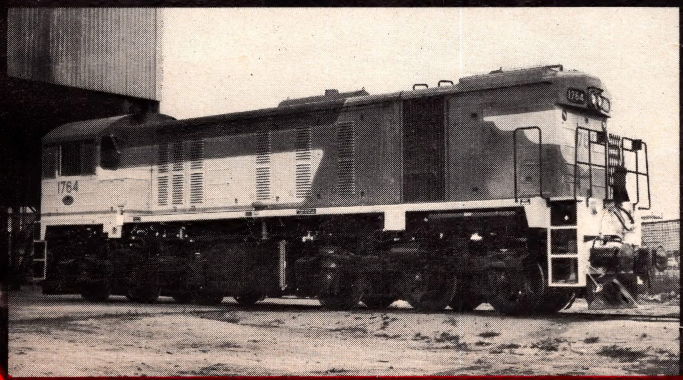

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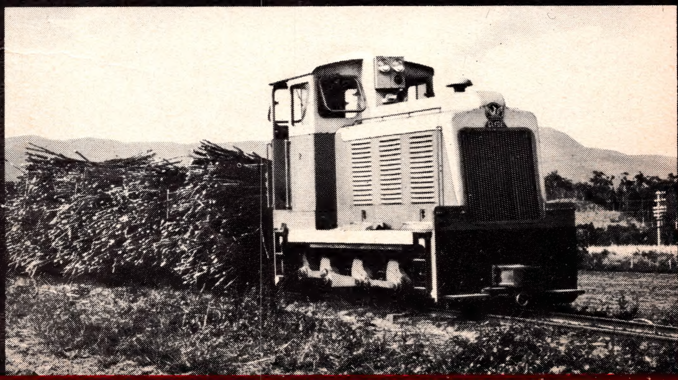

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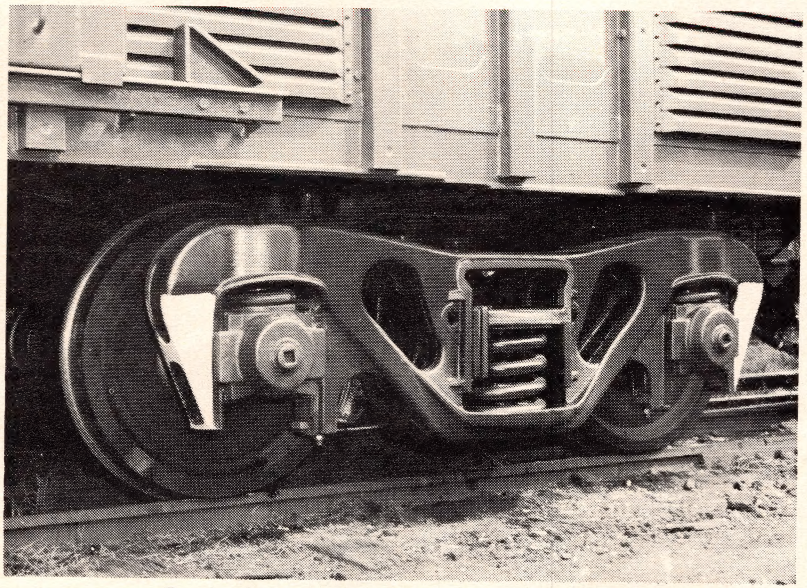

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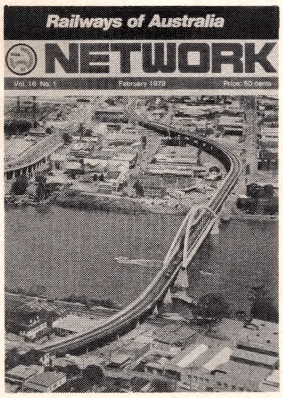

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- Public Transport Commission of New South Wales
- Queensland Railways
- Victorian Railways
- Western Australian Government Railways

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OUR COVER

Brisbane's north and south rail networks are joined at last by the Merivale Bridge.

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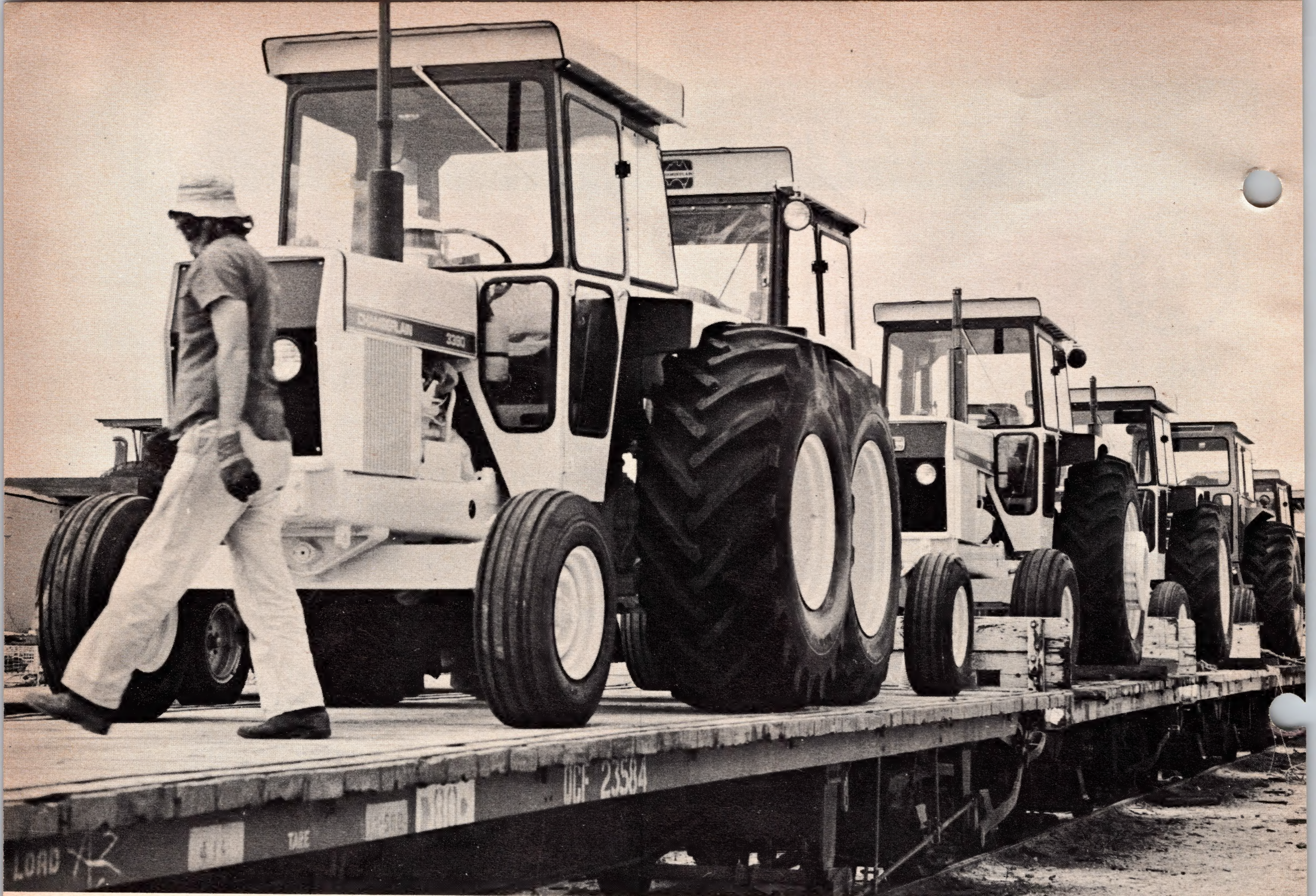
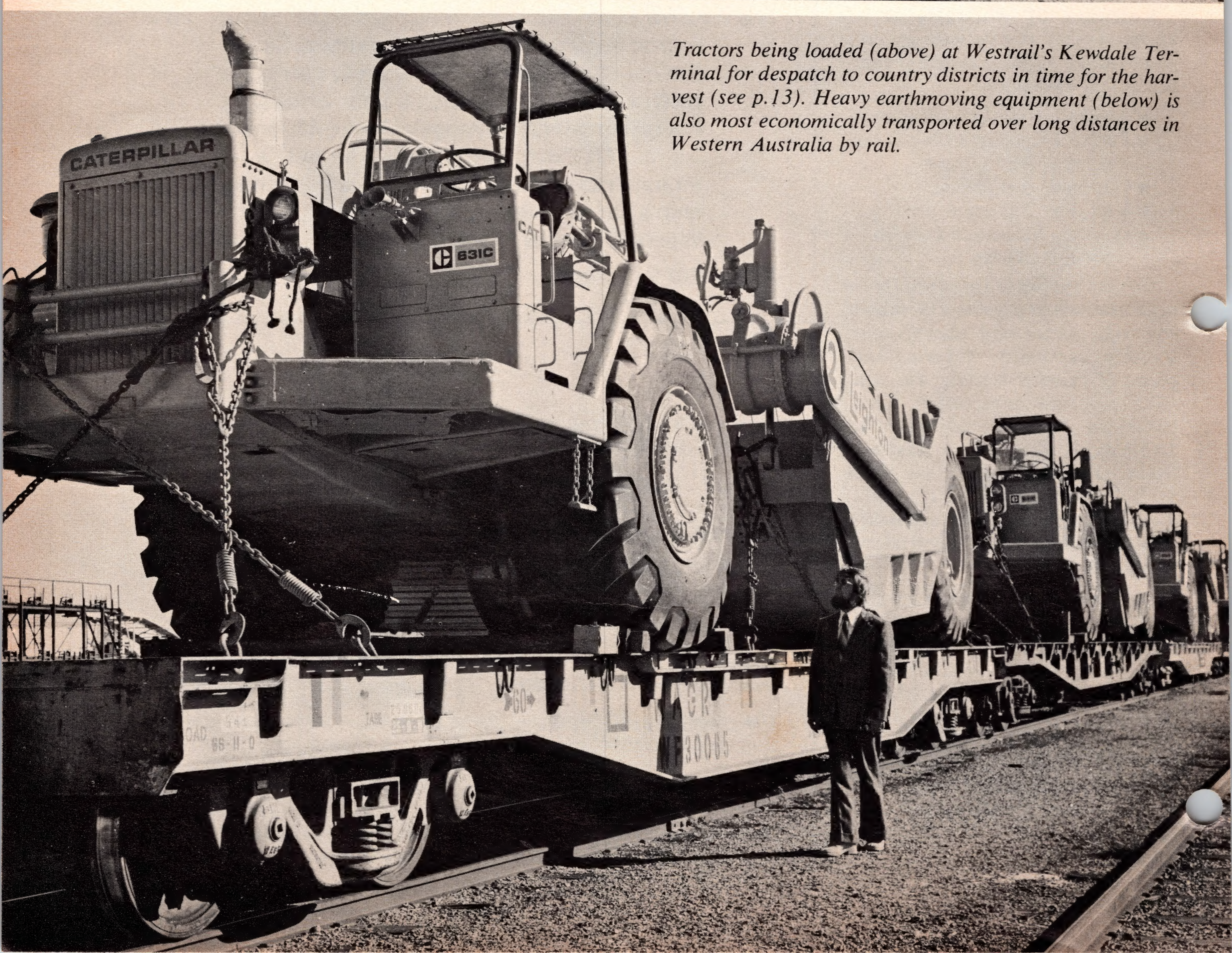
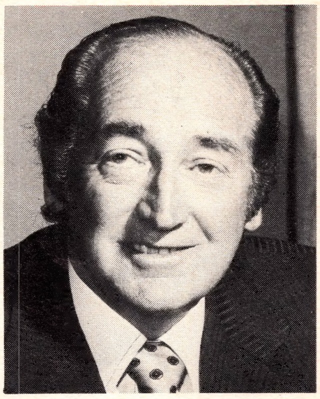




Tractors being loaded (above) at Westrail's Kewdale Terminal for despatch to country districts in time for the harvest (see p.13). Heavy earthmoving equipment (below) is also most economically transported over long distances in Western Australia by rail.

Railways of Australia
NETWORK

From the Executive Director's Desk



Who is killing the Goose that lays the Golden Egg?

Over recent years emphasis has been placed on marketing techniques and initiatives in railway activities. Consultants have been engaged to investigate, evaluate and advise in respect of railway freight and passenger services; and the 1978 Railways of Australia Management Conference, which involved operating, marketing and service branches, was wholly directed to the marketing of railway services. Managements are continually endeavouring to project an acceptable image, establish credibility and provide a reliable and efficient service.

The goodwill of clients and the public cannot be gained and maintained unless the total labour force of the railway industry from top management to the junior employee reflects a favourable image. Despite earnest endeavours by many, the image of railways is too often tarnished by unreliable performance. Nothing destroys public confidence more quickly than failure to perform.

Railway management is constantly reminded by freight-forwarding clients that at least 25% of their freight is retained on road as insurance against unreliable railway service and, particularly, to keep road operators available in the event of industrial stoppages. The re-introduction of a shipping service to Western Australia will put further pressure on railway staff to retain rail traffic.

Over the past decade the railways' share of the eastern inter-capital transport market has declined by over 50% compared with other modes of transport and unless this trend is arrested the labour force of the railway industry will be further reduced. In the present climate of lack of job opportunities, protection of the railway industry means protection of jobs. Passenger traffic has also been declining over recent years despite the fact that Australian overnight inter-capital passenger services are regarded by authoritative overseas visitors as equal to the best in the world.

With the recent introduction of reduced overseas air fares Australia will undoubtedly gain additional visitors, particularly during the European winter; and the Australian Tourist Commission has launched a "Make Friends for Australia" campaign designed specially to encourage overseas visitors to Australia. Railways of Australia are "partners" in this campaign. Imagine the number of "friends" Australia will make if a "lightning" industrial stoppage occurs shortly before the departure of an inter-capital passenger train.

Can railways ever promote a favourable image or provide a reliable service while they are subject to industrial unrest which directly affects clients and the public? Can the adverse effect on the railway industry of industrial stoppages and bans be quantified? Does anyone really gain? In many cases the industrial unrest is dictated by minority sections. Is the shop steward taking over from Union Management?

As most cases of industrial discord relate to money, let us now look at the other side of the coin.

After national wage-case decisions it is common to read the lament of Government and employers in condemnation of the Arbitration Commission's decision and the threat of reduction of job opportunities — which could appear to indicate that any reimbursement to the wage-earner following an increase in the consumer price index is the sole factor affecting the nation's economy.

It is interesting to note that if full indexation had been applied since its introduction in 1975, using the average weekly wage of an adult full-time non-managerial employee as a base figure, the current difference between the fully indexed figure and the amount granted by the Arbitration Commission would be approximately $12 per week. In the case of those on higher wages the difference would, of course, have been greater.

The argument has been advanced that if full indexation had been fully supported, as many contend was the original intention, the Unions would have agreed to and been committed to the system. The present "catch up" and relativity restoration claims etc. which have been the causes of many industrial stoppages would not therefore have arisen.

It may be enlightening to undertake a cost/benefit analysis and compare the cost to the community, industry and the economy generally of industrial stoppages with the cost in real terms of full indexation, assuming that the latter meant industrial peace.

Instead of being outraged by the effect of full indexation any inflationary trend considered to be due to the increased labour component of goods and services could be controlled by rebate of payroll or company tax. In addition, such action would tend to stabilise production costs which are always a cause for concern.

Irrespective of the method of determining it, any wage increase must be accompanied by increased productivity and the resolution of all disputes should be by discussion and negotiation and, if that fails — by arbitration.

It is not uncommon for one party to a dispute to remind the other party that it should abide by the umpire's decision — and unfortunately it is not uncommon for that party to appeal to higher authority after receiving the umpire's decision.

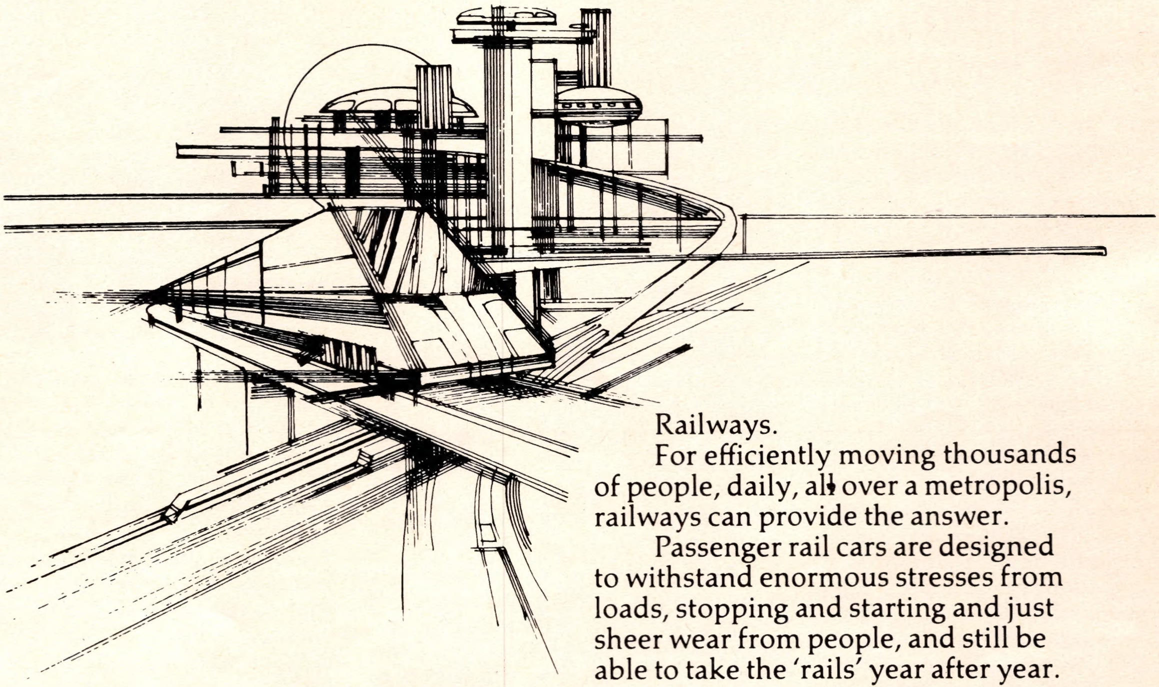
Wages are correctly rigidly controlled by awards but the "man in the street" could be excused for occasionally becoming confused, particularly when only recently the upper dentures of the Prices Justification Tribunal were removed thereby allowing price increases in most industries without reference to such independent authority.

Industry is not alone with its problems. Social aspects concern its employees, particularly those who have members of their family unemployed. At present there are school-leavers who have now been up to two years without employment. This unfortunate situation has tended to create a section of the community which has developed a life style that does not include employment. Perhaps consideration could be given to subsidising employers instead of unemployment benefits being paid direct. Such employment could be arranged on a 2/3 days per week basis. This would give necessary work experience and even satisfy those who contend that certain measures taken by the Government to assist industry results in the replacement of labour by machinery.

It is now time to examine our own contribution to the railway industry, to be less critical of the "they" factor, and to be more conscious of the result of our own performance.

B. M. HOGAN
Executive Director

THE SHAPE OF MASS TRANSIT



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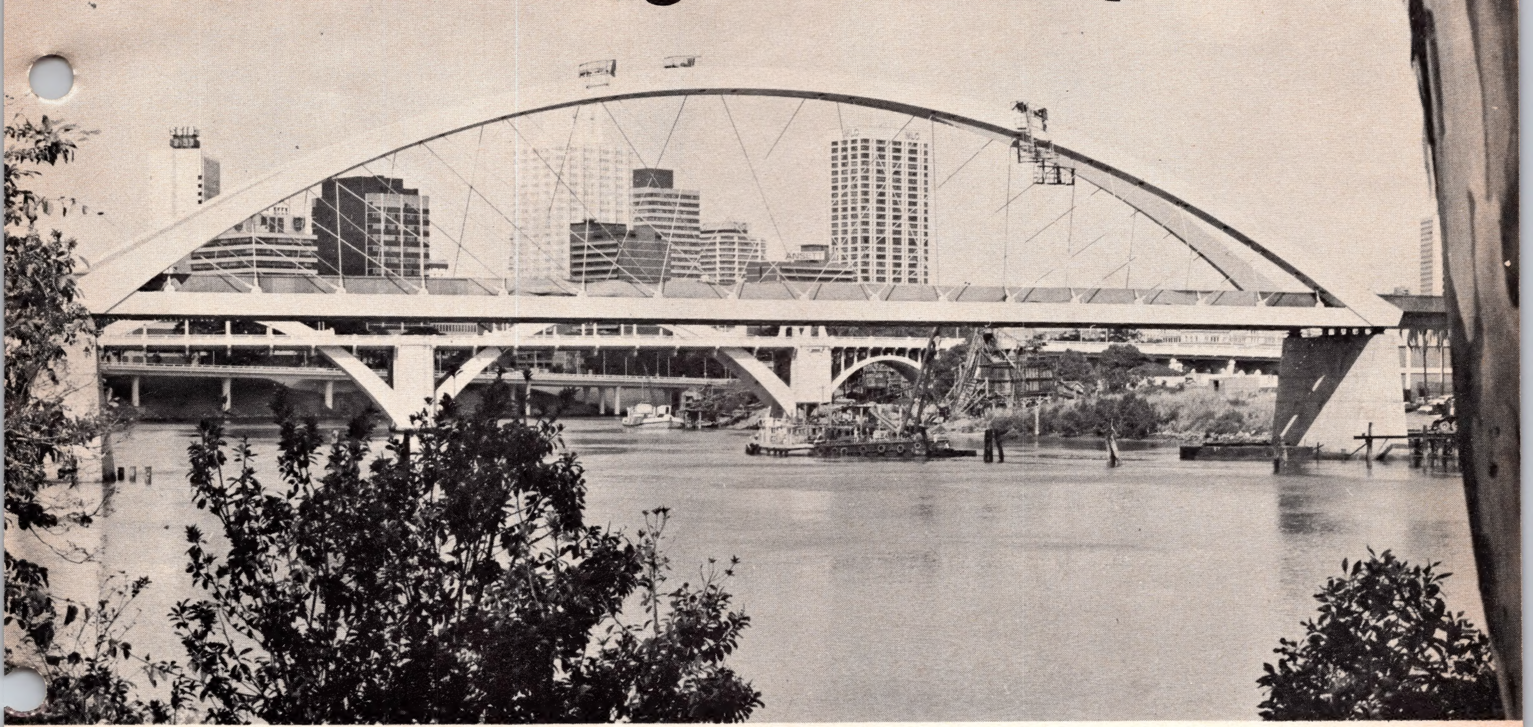
Brisbane Bridges the Gap



At 1.15 pm on Saturday, 18 November 1978, a 17-car passenger train made the first official crossing of the long-awaited cross-river rail link from South Brisbane to Roma Street. In the words of the Premier of Queensland, Mr Johannes Bjelke-Petersen, the occasion marked "the start of the second stage in the history of the Queensland Railways".

Before the historic train ride, more than 1,500 people, including almost a thousand official guests, attended a special ceremony to open the link and to name the river crossing the Merivale Bridge. The function, at South Brisbane Station, followed a construction period of four years and almost a century of debate.

The official opening was performed by Mr Bjelke-Petersen, assisted by the State Transport Minister, Mr Ken Tomkins, his Federal counterpart, Mr Peter Nixon, the Treasurer of Queensland, Mr Bill Knox, and the Chairman of the Metropolitan Transit Authority, Mr Peter Welding. Overseeing the function was the Commissioner for Railways, Mr Jim Goldston; also present on the dais were Mr J. Panizza, Queensland Manager of Transfield (Queensland) Pty Limited (builders of the Merivale Bridge), and the Railways Industrial Chaplain, Brisbane, the Reverend R. T. Nugent, who performed the official blessing.

Among the guests were the Speaker of the State Parliament, Mr Jim Houghton, the Lord Mayor of Brisbane, Alderman Frank Sleeman, the former Deputy Premier, Treasurer and Transport Minister, Sir Gordon Chalk, and the State Opposition Leader Mr Tom Burns. Several Federal, State and local government members were also present.

The former Queensland Railway Commissioner, Mr Alva Lee, and the heads of Australia's other railway systems were in attendance, as were leading businessmen and senior Rotary Club members who organised special activities to promote the historic event.

The opening programme was arranged by a special Committee comprising railway and Rotary personnel, who met for more than a year to prepare for the occasion. The overall responsibility rested with the Assistant Commissioner (Electrification), Mr Doug Mendoza, on behalf of the Commissioner, Mr Goldston.

As guests and members of the public gathered in their designated areas at South Brisbane Station, conditions were sunny, warm and humid and the First Military District Band entertained.

Officially welcoming those present, the Railway Commissioner spoke of what he termed "the most significant improvement to the Metropolitan rail network and urban transport generally".

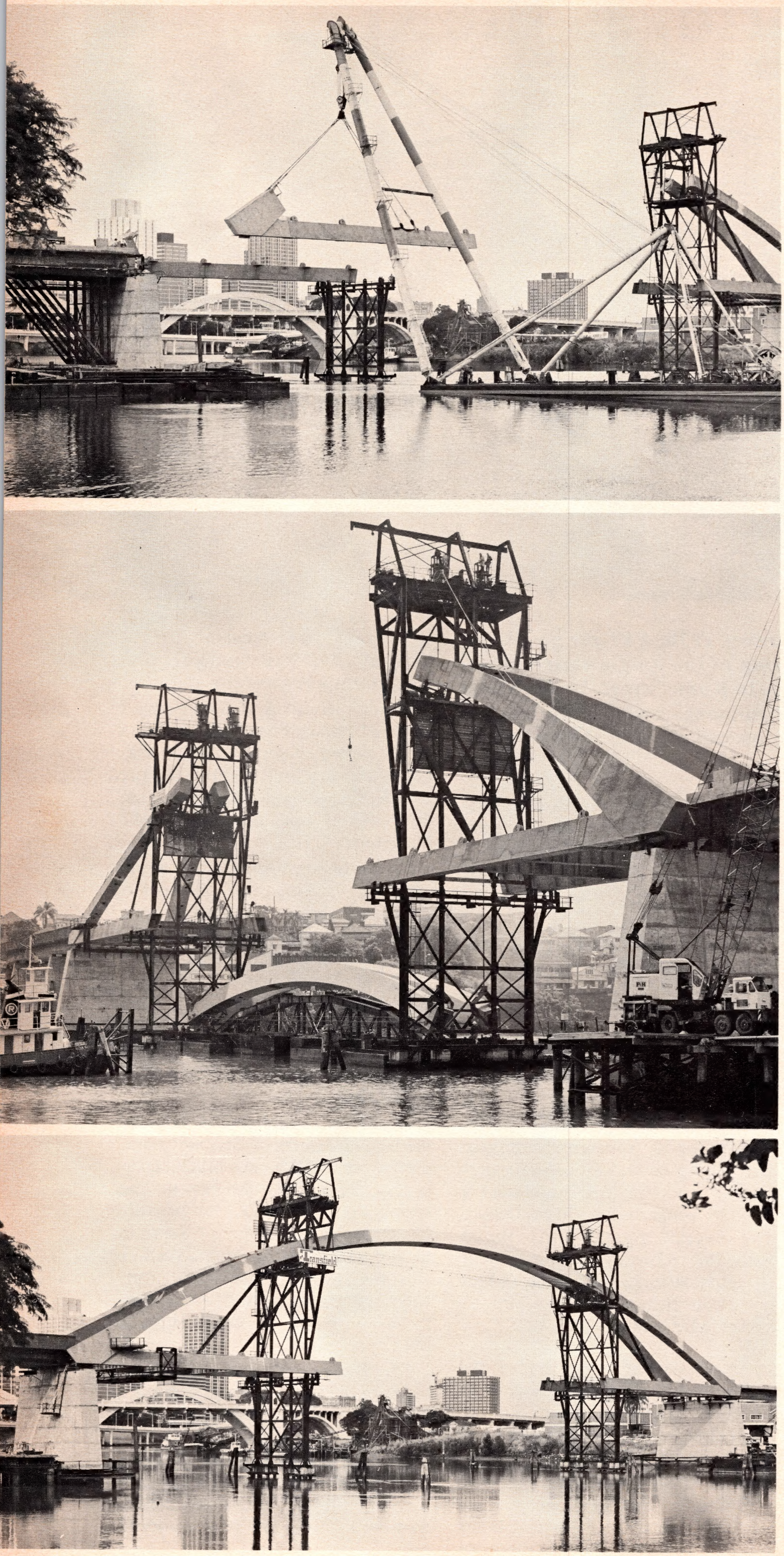
"Every Railway Commissioner since Abraham Fitzgibbon in 1865 has dreamed of seeing such a link, and it's a very high point in the life of the Queensland Railways that this official opening should take place today".

Mr Goldston outlined the many years of investigation, discussion and sometimes heated debate associated with the question of when and where to build a rail bridge across the river.

In a subsequent address the State Transport Minister, Mr Tomkins, highlighted the importance of the link for both members of the public and business customers.

"Principal beneficiaries will be the large numbers of Brisbane commuters who will have a much better access from their homes to the city . . . the link will also provide faster and more economic services to the many goods and livestock customers who patronise the railways . . . giving direct access between the north and south sides of the city".

Mr Bjelke-Petersen, officially opening the link, spoke of a new era in the Queensland Railways; "This bridge . . . symbolises the coming era in rail transport". The pioneering days were over; "We must now turn to building the railways system that will serve the next hundred years".



"We have to continue electrification in Brisbane and surrounding areas; extend electrification to Toowoomba and Rockhampton and eventually right up the coa straighten out and rebuild the existing rail bed, and invest in new rollingstock".

Mr Bjelke-Petersen said that just as the march of progress caught up with the steam locomotive, so it had now caught up with the diesel and the answer was to use the State's coal to raise power to electrify the rail network.

During the 45 minutes of speeches, special plaques were unveiled to officially open the link and to name Merivale Bridge.

Following the addresses, the Premier drove the first "double loco" train through a ribbon mounted on a symbolic arch erected at South Brisbane Station, thus completing the opening ceremony.

* * *

The first scheduled commuter train used the Merivale Bridge link on Monday morning, 20 November 1978.

The opening of the bridge had brought about significant improvements to suburban train services through the introduction of completely restructered timetables.

Integrated services between the south and northside routes now provide direct access for southside passengers to the City centre and the northside rail network, and there has been an improved frequency of services both in the peak and off peak periods. Off peak services during the day have been scheduled at regular or "clock face" intervals.

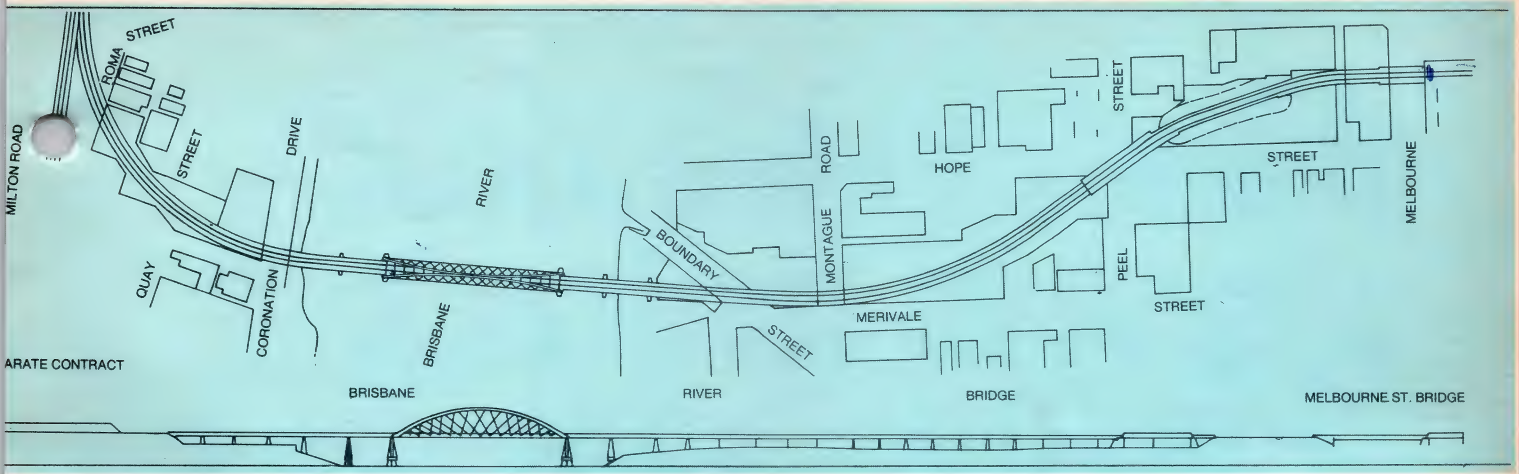
Meantime, an initial survey of city-bound passenger movement through South Brisbane Station following the opening of the Merivale Bridge has indicated an immediate fifty per cent increase in patronage. At the same time, there has been a 266 per cent increase in patronage on south-bound morning services.

* * *

It has taken almost a century to get Brisbane's north and south rail networks joined by a bridge over the Brisbane River.

As far back as 1885 the then Engineer-in-Chief for the Southern Division Railways, Mr H. C. Stanley, arranged for a trial rail

Three stages in construction.



Premier Joh Bjelke-Petersen unveils the plaque officially opening the link, with State and Federal Transport Ministers (Mr Ken Tomkins and Mr Peter Nixon) looking on.

Ribbon breaking (centre) concludes the official opening, with the Premier at the controls (below).

CROSS RIVER LINK · A QUEENSLAND

survey being done to South Brisbane to be extended across the river to the main western line near Countess Street,

In 1889, Stanley arranged to have levels taken for alternative routes to Roma Street tunnel via Herschel Street, and to Central Station via a direct route between Turbot and Ann Streets.

The Herschel Street route was recommended for adoption, and plans subsequently were prepared. However, the Government decided not to proceed and requested a survey for yet another alternative route, connecting with the western line near the Petrie Terrace overbridge or Upper Roma Street. This survey was completed in 1890 but was held over by the Government.

The Government was under pressure from both pro and ante bridge groups. Worried at losing trade to central city businesses, the merchants of South Brisbane fought vigorously against the bridge proposal. On the other hand, representatives of the Brisbane Railway Bridge League lobbied strongly for a link but canvassed a direct route to Central Station.

In 1913, the then Premier of Queensland requested that plans for the direct route through Ann Street to Albert Square be put in hand, but nothing eventuated. In 1919 the matter was raised again but after further pressure from anti-lobbyists was once more allowed to lapse.

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Since 1958 Humes have been involved in the design and supply of prestressed concrete sleepers to suit a variety of conditions. In addition to the conventional prestressed concrete railway sleeper, Humes design and manufacture special purpose sleepers. Of these, the one generating the most interest today is the Electrical "sleepers" for track circuitry.*

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4. *Can also be included in timber systems.

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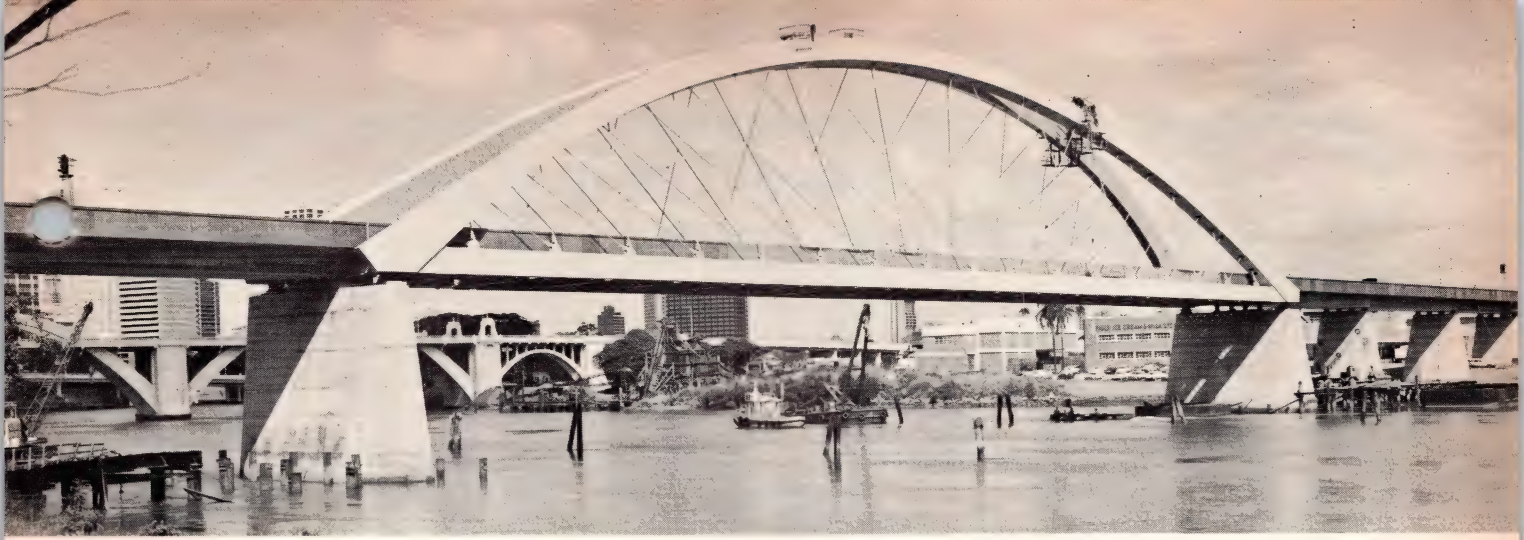
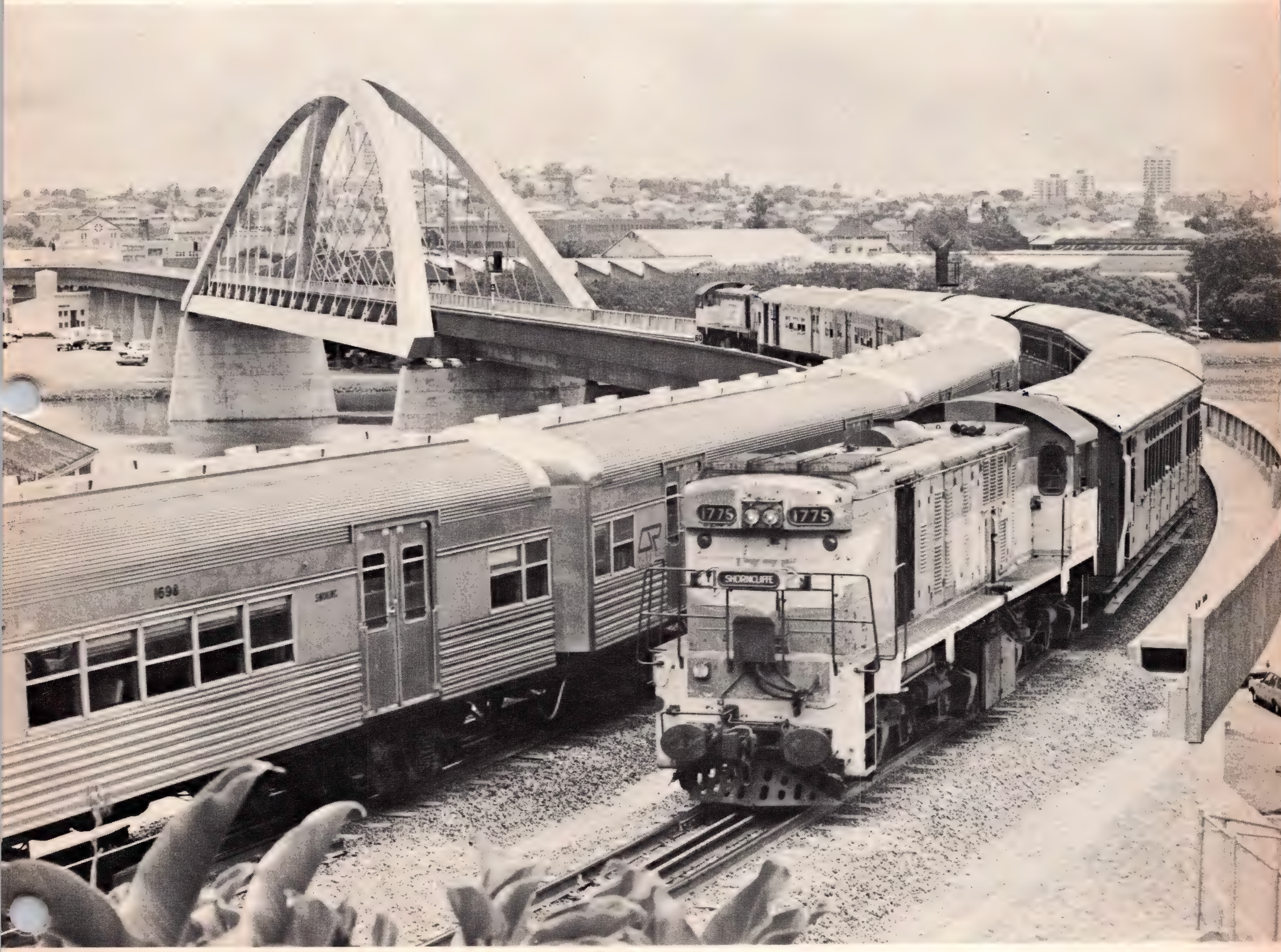


In 1950 the issue was raised in connection with proposals to electrify the Brisbane suburban network. Surveys and plans were finalised in 1954, and in 1955 the State Government announced its decision to proceed with the connection and initiated land resumptions, most of which were completed by 1960. However, planning was again deferred because of finance problems.

The present link is the direct result of recommendations contained in the South East Queensland and Brisbane Region Public Transport Study submitted to the Government in 1970 by Wilbur Smith and Associates. The route generally was as surveyed in 1890.

Cameron, McNamara and Partners were commissioned to carry out the design work in 1971, and a contract was let to McDougall Ireland Pty Limited in 1974 to construct a tunnel from the western line near Upper Roma Street. The first sod was turned by the then Transport Minister, the late K. W. Hooper, on 5 August 1974, and the contract was completed in 1976.

In 1975, a contract was let to Transfield (Qld) Pty Limited for the construction of a bridge over the Brisbane River from the tunnel to South Brisbane Station, and the first pile was driven on 21 August 1975.



Monday, 20 November 1978 — the first commuter trains using the new link.

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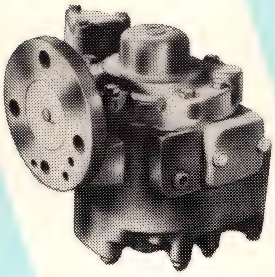
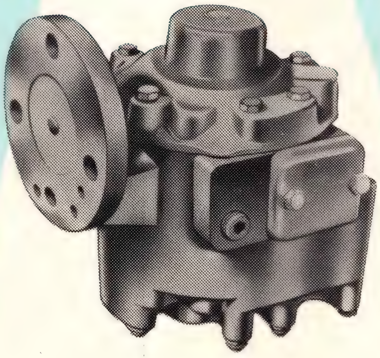
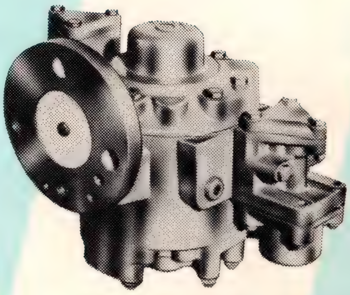


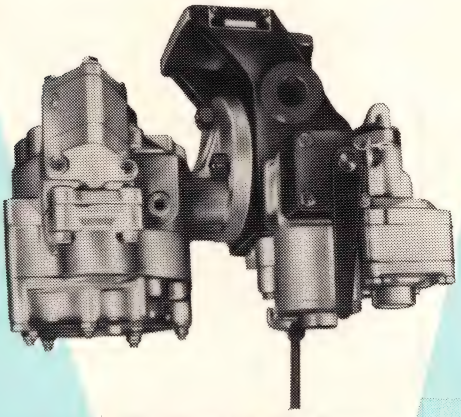
WPI-WFI – With inshot and reduction ensuring for passenger or freight stock.



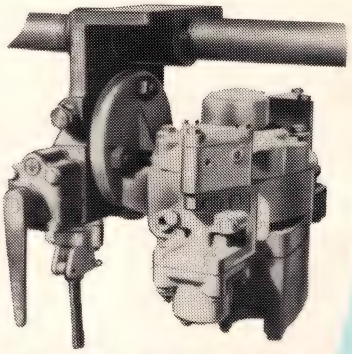
WP – Simple direct release valve for passenger stock.



WF3 – With inshot reduction ensuring and retarded recharge for freight stock.



WF Control Unit for empty load relayed freight braking.



WF2 – With all features including accelerated release. Shown pipe bracket mounted for freight stock

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Type "W" Triple Valves provide an excellent method of modernising existing stock. It will interchange with older "AF" and "ITV" triple valves, being suitable for mounting on existing brackets.

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NEW ZEALAND: Westinghouse-McKenzie-Holland (N.Z.) Ltd., Rata St., Naenae. Tel. 67 7051

Westrail's Activities and Prospects

Wheat train awaits departure at Merredin Silos after loading.

Three factors were responsible for controlling Westrail's growth over the 1977/78 financial year — a slow moving economy, a recession which reduced world demand for minerals and a reduction in the grain harvest.

Grain and mineral haulage is the mainstay of Westrail's operation and together they account for about 70 per cent of the annual rail movement.

A decline in these commodities had a depressing effect on railway operations generally and last financial year Westrail's total haulage slipped by some 370,000 tonnes to 18.8 million tonnes, bringing to a halt the growth of traffic which had been increasing over the past ten years at an average rate of nine per cent annually.

Other figures show that expenditure rose by 11 per cent to a new level of $151.2 million whilst revenue increased only by nine per cent, to $150.6 million.

The Harvest

Good rains during July and September 1978 heightened the hopes of the agricultural community, especially in parched northern and eastern regions of the State which had experienced severe drought conditions for several years.

From the start of harvesting it was realised that the wheat crop would be a record one and that Westrail would be called on to haul roundly four million tonnes.

In anticipation of this bumper harvest, grain handling facilities and operations were improved during 1978 and new wagons introduced. A new dual discharge grid was brought into use in December at the huge CBH Kwinana Grain Terminal to speed up unloading and turnaround of wagons.

By mid-December Westrail had improved its weekly grain haulage by between 20 and 30 per cent over that of the previous season, and planned for an average weekly grain movement in excess of 120,000 tonnes over the peak eight weeks from mid-December.

Freight Services

Bauxite has been one of Westrail's more important mineral traffics. For 1977/8 the quantity hauled from mines at Jarrahdale in the Darling Ranges to the Alcoa refinery at Kwinana rose marginally to 4.4 million tonnes, which just about equals the total of all railway freight traffic handled only twenty years ago.

With the construction of harbour facilities and storage at Bunbury, 180 km south of Perth, an increasing tonnage of alumina is being transported there from Alcoa's refinery at Pinjarra instead of to Kwinana. Last financial year 1.2 million tonnes were hauled to Bunbury and 985,000 tonnes to Kwinana.

Movement of mineral sands was steady at 800,000 tonnes, coal topped 1.3 million tonnes, and woodchips transported from Manjimup to Bunbury exceeded half a million tonnes.

Other important mineral traffic included 1.2 million tonnes of iron ore from Koolyanobbing to Kwinana, 235,000 tonnes of salt from Lefroy to Esperance and 305,000 tonnes of nickel concentrates from Redmine and Malcolm to the Hampton smelter near Kalgoorlie. Nickel concentrates and nickel matte railed to Kwinana totalled 170,000 tonnes.

Loading alumina at Alcoa's Pinjarra refinery for haulage to Bunbury, for storage and shipment.

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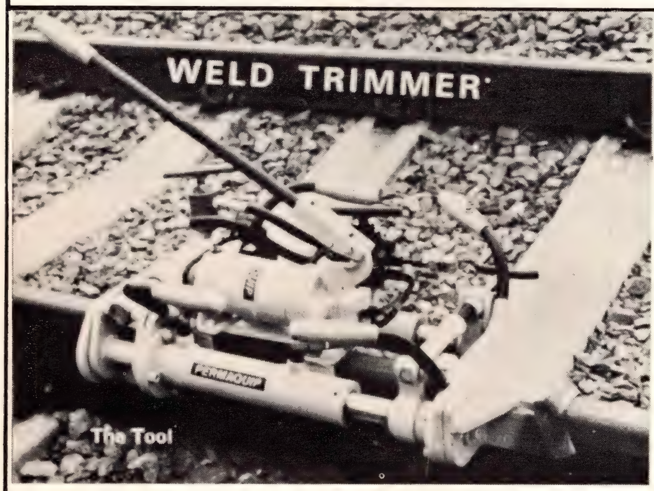
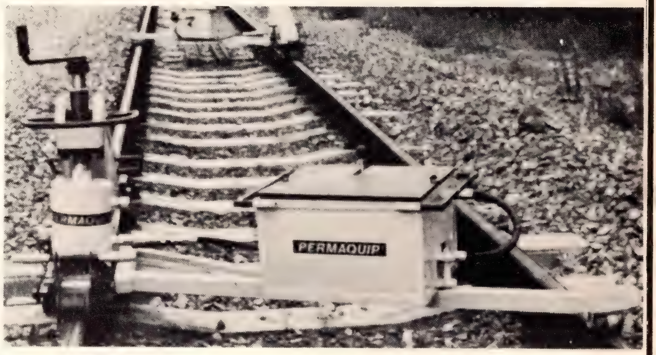
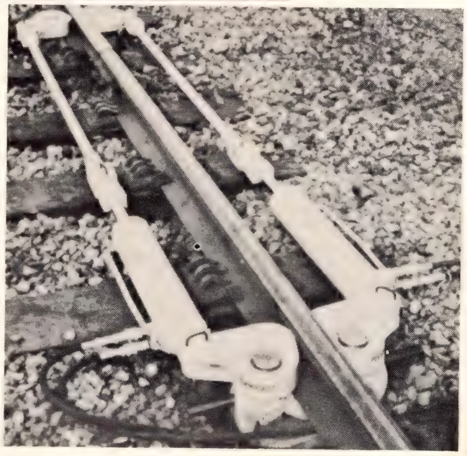


WELDTRIM PQ 30 WELD FLASH STRIPPING MACHINE. For use when thermite welding rails, this portable machine cuts grinding time to a minimum and makes for smooth, constant profile.



RAIL JOINT STRAIGHTENER



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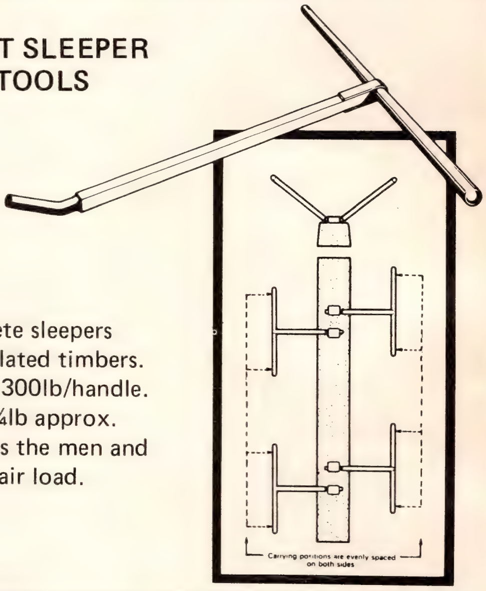

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Since the commencement of interstate standard-gauge freight train operations nine years ago, interstate traffic to Kewdale Freight Terminal has more than trebled — achieving over one million tonnes in 1977/78 for the second year in succession.

The vital role of the east-west standard-gauge railway can be assessed from the fact that 6.5 million tonnes, being approximately one third of the total freight tonnage handled by Westrail, were carried on the 500 kilometre Kwinana/Koolyanobbing rail link.

Road Freight

In association with its rail operations Westrail operates a comprehensive network of road freight services. Roundly 2.6 million km were run during the 1978 financial year by Westrail road trucks, operating either ancillary to existing rail services or to areas not served by rail.

Track Upgrading

To upgrade the Kwinana to Koolyanobbing railway line some $76 million (in 1977 dollars) is to be spent over the next five years in a rehabilitation programme using 60 kg/m rail laid on concrete sleepers.

All major contracts for this upgrading have now been let. A contract valued at $17.4 million was awarded during the year to John Holland Constructions Pty Ltd for the manufacture of concrete sleepers and also some of the ballast requirements, and contracts amounting to $7.3 million for rail fastenings were awarded to Rail Track Fasteners Ltd and Pandrol (Aust) Pty Ltd.

A $15 million contract to supply 60 kg/m rail went to BHP Pty Co Ltd whilst a $10.5 million contract for the actual track reconstruction work of replacing rail and sleepers has been let to Roberts Construction Australasia Pty Ltd. There are still major contracts to be let covering additional ballast and earthworks, and a further $12 million is to be spent on work to be carried out by Westrail staff.

Track limitations associated with a demand for heavy bulk haulage have underlined the need for increased levels of technical research. In meeting this need Railways of Australia have undertaken certain research programmes.

Westrail's role in this research is

A Westrail iron-ore train leaves Koolyanobbing for the 500 km east-west haul to Kwinana.

A unit train hauling nickel concentrates from Redmine, Kambalda, to the nearby Hampton Smelter.

Loading coal at Western Collieries mine at Collie for haulage to power stations in the metropolitan area.

Pedestrian walkway between Perth's city railway station and the bus terminal

a 10-year track study programme. A number of different track structure forms will be built over 17 kilometres on the standard-gauge railway between Meckering and Tammin, as part of the current upgrading work, to show the effects of variations in specifications for ballast, sleepers, rails and fastenings. During the programme the track will be loaded under normal operating conditions with close monitoring of geometry deterioration and related maintenance costs.

In conjunction with the Agnew nickel project development in the Eastern Goldfields a two-year contract has been awarded for partial re-sleepering and re-ballasting the 260 km standard-gauge line between Kalgoorlie and Leonora.

Development is well in hand for a CTC signalling system on the 82 km section of line between Coolup and Bunbury, to be controlled from Picton. The control building was recently completed.

A central sleeper receiving and processing depot was also established at Picton during the year. All timber sleepers in the future will be sent to the depot for drilling, adzing and preservation treatment prior to their despatch to tracklaying and re-sleepering sites. Field distribution is being handled by a specially equipped mechanised team.

To meet increasing demands fo coal, $4 million has been spent on upgrading the 50 km line between Collie and Brunswick Junction. Previously, coal trains were restricted to a maximum axle load of 16 tonnes and this has now been increased to 19 tonnes permitting the use of new higher payload coal wagons and also the operation of Westrail's heaviest narrow-gauge locomotives on this section.

Unfortunate circumstances beyond Westrail's economic control forced the closure last April of the 68-year-old Mullewa-Meekatharra railway service. Rail operations ceased in the face of reduced freight haulage and the very poor condition of the light (45 lb/yard rail) track, which would have cost in the vicinity of $30 million to rebuild.

Freight carriage is now being handled by franchised road operators while Westrail continues its regular passenger motor coach service to the region.

City Station Upgrading

The first steps have been taken in the redevelopment of City Station in co-operation with Perth City Council. Plans include the removal of some old buildings, construction of a new parcels office, the upgrading of the station buildings overall and the opening of a walkway linking the rail station with the adjacent MTT bus terminal. Landscaping of areas close to the new Perth Cultural Centre are also included in the proposals.

New Equipment

During the year, $17.6 million was spent in the acquisition of new locomotives and wagons and in upgrading track and other facilities. Westrail's Midland workshops designed and built many specialised wagons including coal hoppers, bulk cement and nickel concentrate wagons, grain hoppers, alumina wagons, rail tankers, and ballast hoppers.

The first of 11 new narrow-gauge mainline locomotives have been introduced.

Included in the many manufacturing jobs completed in the Midland Workshops during the year was the casting and machining of the last of 24 bogie frames for the new locomotives — one of the most complex projects of this nature yet undertaken by Westrail.

Passenger Services

On the rail passenger side, patronage on the Perth-Bunbury "Australind" service increased by 16 per cent due mainly to the promotion of educational tours, while "Prospector" Perth-Kalgoorlie passenger numbers rose by six per cent.

Unfortunately there was a decline in interstate rail patronage — passengers travelling on both "Indian-Pacific" and "Trans Australian" were down by 18 per cent.

The "Albany Progress" overnight passenger train was withdrawn on December 1 because of the declining patronage and the deteriorating condition of carriages. It was no longer possible to provide a service of an acceptable standard without large expenditure on construction of new rollingstock, or otherwise refurbishing the existing carriages for a few years.

The train has been replaced by five additional motor coach services each week, making a total of 15 now serving the Albany region. This long-established road service covers the much shorter road distance from Perth to Albany in less than half the time previously taken by the overnight "Albany Progress".

Westrail's motor coaches ran a total of 2.7 million km last financial year and to maintain a first-class service 12 new Mercedes vehicles were introduced to replace older units. These new air-conditioned coaches are being used on the long-distance routes to Esperence and Geraldton, each having a route distance in excess of 700 km, and to Albany 400 km.

New Supply System

With annual purchases to the value of about $30 million, materials management is an increasingly important facet of Westrail's operations.

Progress was made during the past year towards the introduction of a computer-based materials supply system which will provide more effective control over inventory, material usage and also supplier performance. Head-office computer facilities were upgraded during the year to meet the requirements of this new on-line system.

The Future

Westrail's outlook for 1979, its centenary year, is guardedly optimistic.

The good harvest has already provided the railway with an overall increase in grain haulage. However, the benefit of any recovery in the agricultural sector will not be fully evident in Westrail's operations until 1980.

There appear to be prospects for a slow recovery in the nation's economy, but increased demands for Western Australian minerals depend largely on the needs of overseas manufacturing industry.

Westrail is equipped and geared ready to handle increases in demand for both general freight and bulk mineral haulage.

Recent Contracts

ANR — Design, supply, delivery, installation and commissioning of solar power plants for the Tarcoola-Alice Springs communications system: Lucas Industries Aust Ltd ($527,044).

ANR — Manufacture, supply and delivery of fifteen 54,000 litre water tank wagons: Comeng W.A. ($274,620).

QR — Construction, erection and completion of earthworks, drainage, fencing, communication pole line and ancillary works for Gregory Branch Line between Tolmies and Gregory: G. Abignano Pty Ltd ($7,893,598).

QR — Design, supply, installation and commissioning of Centralised Traffic Control System for the Norwich Park Railway project: Westinghouse Brake & Signal Co (Aust) Pty Ltd ($1,311,130).

QR — Construction of Callemondah Depot Formation: Cyril Golding Earthmoving Pty Ltd ($409,498).

QR — Reconstruction of bridge over Laidley Creek at 85.04 km Main Line: Doval Constructions (Qld) Pty Ltd ($272,612).

QR — Supply and delivery of starting batteries for Diesel Locomotives — 1979 requirements: Chloride Batteries Aust Ltd ($263,742).

QR — Supply and delivery of 1000 doors and 500 body ends for Class 'FJS' wagons: Vickers Ruwolt, Scotts of Ipswich Division ($221,222).

QR — Manufacture, supply and delivery of 588,000 dogspikes, Gregory Project: Spurway's Industries Pty Ltd ($193,453).

QR — Supply of 34,000 cu. metres of prepared stone railway ballast — delivered into rail wagons or to stockpile at Cloncurry: Mt Peter Contractors ($180,200).

QR — Supply and delivery of 29 sets of points and crossings: Westinghouse Brake & Signal Co (Aust) Pty Ltd ($164,489).

QR — Supply and delivery free on rail at Tolmies of corrugated steel pipe culverts for the Gregory Branch Line: Armco (Aust) Pty Ltd ($156,552).

QR — Manufacture, supply and delivery of 700,000 red dogspikes: Westinghouse Brake & Signal Co (Aust) Pty Ltd ($138,100).

QR — Supply and delivery of one only ballast tamping machine with track surfacing and lining equipment: Canron Railgroup ($125,858).

QR — Earthworks for passing loop extensions at tunnel, Westwood and Aroona, for the Gregory Mine Railway: Cyril Golding Earthmoving Pty Ltd ($108,686).

VR — Design, supply, delivery and installation of an automatic sprinkler system in the Administration Offices and Amenities areas at Flinders Street Station: Wormald International (Aust) Pty Ltd ($148,118).

WAGR — 1000 wagon wheels and 500 wagon tyres: Commonwealth Steel Co Ltd ($422,225).

WAGR — Supply and delivery of 100 locomotive wheels: Commonwealth Steel Co Ltd ($46,041).

WAGR — Supply and delivery of two adzing machines: Noyes Bros Pty Ltd ($53,900).

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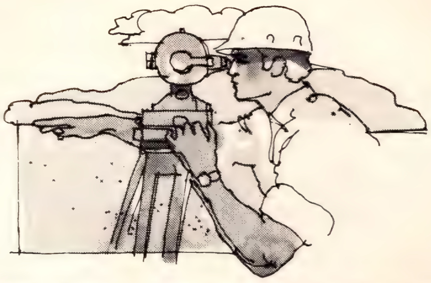

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Oil and the Railways — I

The first of three contributions
by a technical correspondent

A great deal of misleading nonsense has been written about the oil crisis, and about how it's up to the railways — among others — to electrify us out of it. *Network* readers may therefore be interested in some facts and figures that put the whole issue of oil and the railways into a more accurate perspective.

Electric power derived from brown or black coal is used to move suburban, interurban and some main-line traffic in the Sydney and Melbourne areas, but both the Railways of Australia (ROA) systems and the private mineral lines ultimately depend almost entirely upon oil for their traction energy. Diesel locomotives, self-propelled diesel cars and track maintenance machines use a product of petroleum refining called automotive distillate oil, which henceforth we'll simply call "diesel fuel". Diesel fuel is also used by heavy trucks and buses (most ships use a heavier variety), and by tractors, earthmoving machinery and mobile generators.

As a refinery production option diesel fuel is not all that different from heating oil, the jet fuel used by commercial aircraft, and home kerosenes. All of these are so-called "middle distillate" fractions and there is some flexibility to adjust the production of each to suit the demand.

Oil Products and Transport

In 1976-77 Australians used 37,420 million litres — that's over thirty million tonnes — of petroleum products, 60 per cent of them to energise our transport. Diesel fuel is thus only one of the many products of transport interest which, in order of increasing product heaviness, are:

Product	*%*	*Transport Users*
Aviation spirit	0.3	Light aircraft
Petrol	37.1	Cars, vans, trucks, boats
Jet fuel (aviation turbine fuel)	5.1	Jet aircraft
Diesel (automotive distillate)	15.9	Trucks, buses, trains
Industrial diesel oil (IDO)	5.0	Ships
Heavy fuel oil (HFO)	17.8	Ships
Lubricants	1.2	All vehicles

The dominant role of petrol in assuring our continued personal mobility is thus well-confirmed. But we should never let this personal dependence blind us to the importance of the commercial transport fuels to the national economy — the economy upon which all of us ultimately depend.

Diesel Fuel

The 15.9 percentile units taken as diesel fuel went as follows:

Transport Users — 6.5 Units	
Rail	1.9
Road	4.1
Ships	0.5

Non-Transport Users — 9.4 Units	
Agriculture	4.3
Mining	2.0
Construction	1.2
Other	1.9

Thoughtful consideration of what kinds of use would make up these figures suggests that most non-transport consumption would be in portable, mobile or stand-by diesel engines. There are few real alternatives for these, and thus there is relatively little scope for diverting diesel fuel from non-transport to transport users. An additional 3.1 percentile units of diesel-like heating oils and kerosenes, and another 5.1 units of jet fuel are much more significant, since there *are* practical alternatives for many of these. The high growth rate of jet fuel use — a 114% increase is forecast by 1985 compared with only 44% for diesel fuel growth — is of particular significance since aircraft gas-turbine engines can burn gasoline-based JP4 fuels. There is a slightly higher crash fire risk, but the option exists. Diesel engine users, like the railways, have no such option.

Railways: Fuel Inputs and Transport Outputs

The diesel railways' 1.9 percentile units of all petroleum products amount to almost 700,000 kilolitres (or 588,000t) which is not quite 12% of all the diesel Australia uses. The large table, which has not previously been published, shows where and by whom this railway fuel was used, and the overall significance of rail's share both nationally and by State.

Estimates by Nicholas Clark based on the latest available figures (1970-71) suggest that diesel rail moved about 3.7% of the total (all-modes, all-roles) "people" task using some 2.0% of the total transport energy, and some 28% of the freight task with under 5.0% of the total transport energy. Absolute values would certainly have changed since 1971, but relativities would be much the same. The general conclusion is that rail is an exceptionally fuel-efficient way to move people and freight.

One may well ask why. The fundamental reason has remained unchanged over 150 years: of all transport vehicles in common use, only the hydrodynamic (i.e. wave and skin) resistance of a large, slow-moving cargo ship is less than the resistance of rolling a steel-wheeled train on steel rails. And that wheel is rolling on a rail free of fuel-wasting traffic congestion.

Too much stress should not be laid on simplistic figures of average fuel effectiveness — the different transport modes have different roles to play as well as often competing in the same role. And all modes occasionally use fuel inefficiently — shunting, moving empty trucks and "light engine" working are the obvious railway examples. But overall, the picture is quite clear.

Moving people, inter-city trains provide more space, comfort and speed than intercity buses at around the same low level of fuel consumption: about 0.8-1.0 litres per 100 passenger km (allowing for average empty seats). Medium-sized cars use about six times this and large

Staying dependable with

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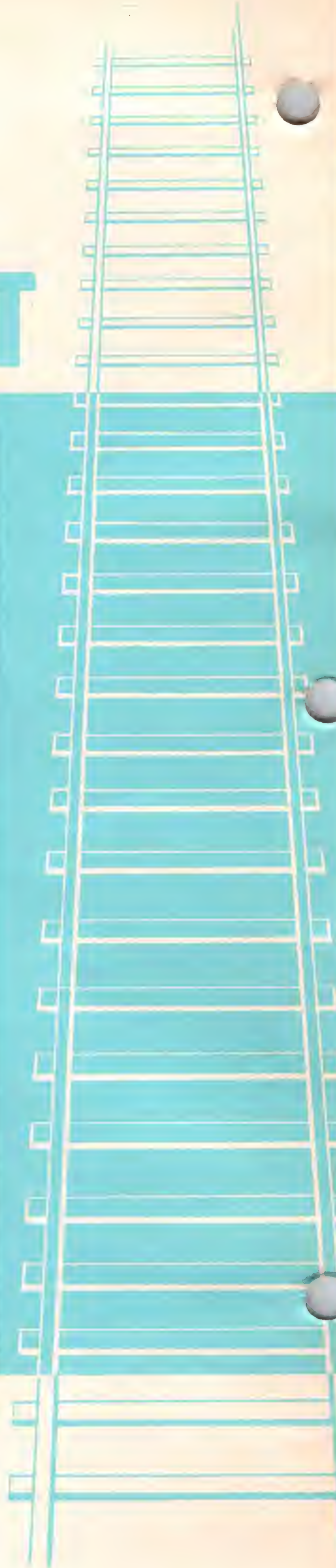
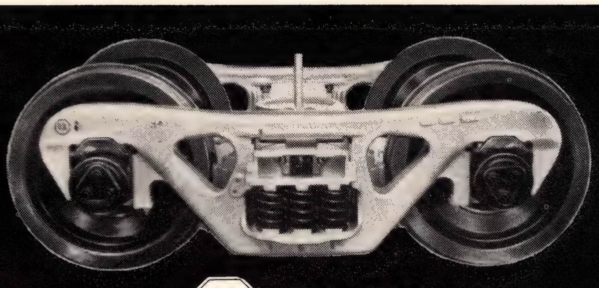
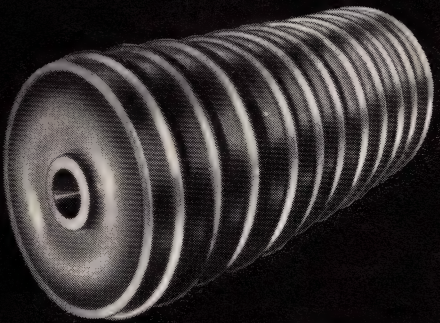


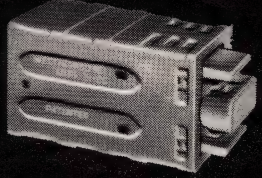


ASF Ride Control Freight Bogies

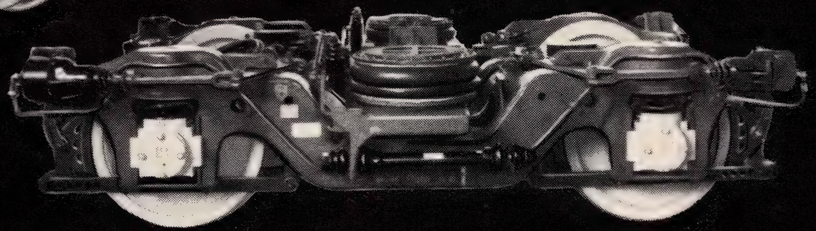
ASF "Alliance" Couplers



Griffin Pressure Cast Wheels



Cardwell Westinghouse Draft Gears



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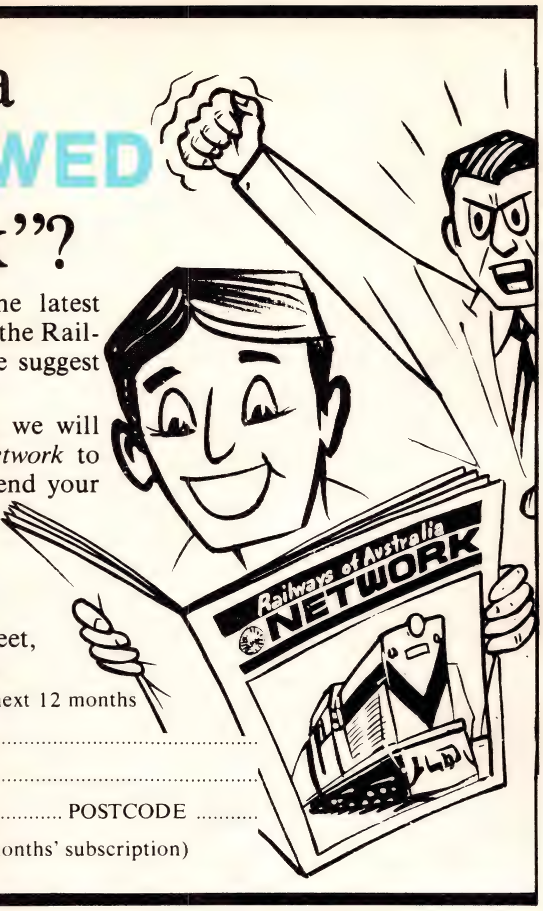
cars and domestic jets about eight times as much.

Moving cargo, a fully loaded diesel freight train is roughly five times more effective than a semi-trailer truck: about 0.5 versus 2.5 litres per 100 tonne-km (tkm). A goods train is about as fuel effective as a slower roll-on, roll-off cargo ship. In moving minerals, where a train is always fully loaded in at least one direction, rail is almost as efficient as a bulk cargo ship: about 0.2 litres per 100 tkm for the near-ideal conditions of heavy iron ore trains over well-graded, purpose-built lines. The Pilbara iron ore trains handle about half the total national rail freight task for about one-seventh of the national rail diesel fuel consumption, and with modern low-tare-mass equipment, conditions almost as good would apply to much of the mineral haulage over old-established, mixed-use ROA routes.

The next article will consider the prospects for railway electrification and the use of alternative fuels in diesel locomotives.



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AUTOMOTIVE DISTILLATE FUEL CONSUMPTION IN 1976-77

Total Automotive Distillate (a) — Railway Share (b)

State	kl(a)	% of national	System		kl(c)	Rail share as a % of			
						State		All Australia	
			Government Railways						
Queensland	1,240,660	20.9	QR		160,109		12.9		2.69
NSW	1,578,938	26.6	PTC of NSW		193,418		12.2		3.25
Victoria	1,130,951	19.0	VR		78,763		7.0		1.32
South Aust	486,615	8.2	SA Metropolitan		(d) 9,568	1.97		0.16	
			ANR ex CR	44,372(e)		9.12		0.74	
Tasmania	167,596	2.8	ex SAR	41,860		8.60	19.69(g)	0.71	1.61(g)
NT	157,665	2.6	ex TGR	7,726			4.61		0.13
WA	1,182,558	19.9	ex NAR	nil(f)			nil		nil
			(all ANR)	——	(93,958)		—		(1.58)
			Westrail		62,700		5.30(j)		1.05
			All Government railways		598,516		—		10.07
			Private railways (all in WA) (h)						
			Hamersley						
			Newman						
			Robe R						
			Galsworthy						
			All private railways (WA)		100,241		8.47(j)		1.68
Australia	5,944,983	100	All Australian Railways		698,757		—		11.75

(a) "Oil in Australia", 1977. The total represents 15.9% of total Australian petroleum product consumption.

(b) Major systems only. Omitted are BHP's Iron Knob and Newcastle steelworks lines, AIS' colliery and Kembla lines, the Emu Bay railway (Tas), Comalco (Weipa, Qld), the steam-operated South Maitland Railway in NSW, cane tramways in Queensland, the Christmas Is. Phosphate Railway and the museum lines.

(c) Information furnished by the Administration concerned.

(d) Now operated by STA of SA (Rail Division)

(e) Trans and Central Australian Railways

(f) NAR ex Darwin closed. CAR to Alice Springs in CR see (e)

(g) All SA

(h) All iron-ore lines.

(j) The total rail share in WA is 13.77% of the State's and 2.73% of the national automotive distillate consumption.

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Canadian National Turns the Corner

by J. L. Cann
Vice President, Operations, CN Rail.

After two decades of deficits, Canadian National has recorded a net profit in each of the last two years; and a major force behind the increase in CN Rail's income is effective cost control.

The struggle to control expense in the face of rapidly escalating costs is one of the greatest challenges for the operations function of railways everywhere — and CN Rail is no exception.

J. L. Cann

One of the misconceptions about the company is that, because it is government-owned, it need not concern itself unduly with reducing costs. Nothing could be further from the facts. CN was created because such railways as the Canadian Northern, Grand Trunk and Grand Trunk Pacific were in a state of financial collapse. For the good of the country, the massive investments already made were not allowed to go down the drain, but the Royal Commission which recommended the formation of Canadian National Railways — and every Royal Commission which has examined it since — made it perfectly clear that CN's mandate was to operate "on a commercial basis, under politically undisturbed management."

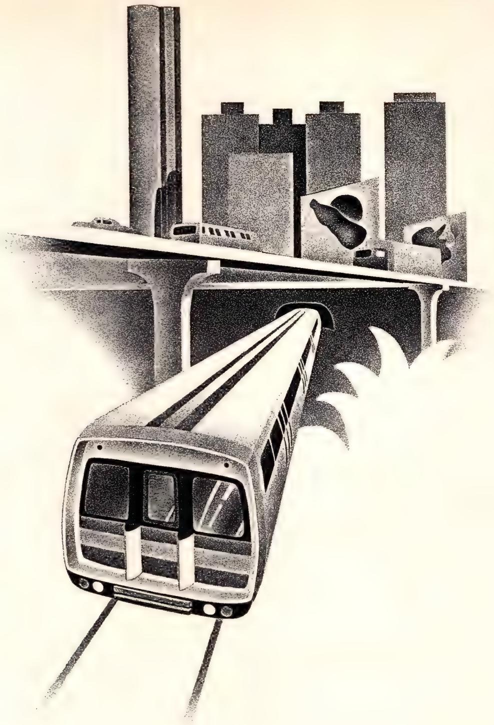
So CN can be counted in when it comes to seeking profit and productivity and more efficient ways of doing business.

As competition from other modes increases, higher costs can no longer be simply passed on to the customer. In addition, Canadian railways are bound by a number of regulations which constrain the raising of rates to cover costs. Some are sheer anachromisms, long since past their usefulness; Crowsnest grain rates, for example, were established in 1897 and have remained unchanged! Canadian railways, operating at 1977 expense levels, receive about one-fifth to one-quarter of the rate for an equivalent grain movement in the United States.

Capital Spending

Faced with these complications on top of a less than buoyant economy, what has CN Rail done and what does it plan to do? To begin with, we recognize that good physical plant is basic. But money spent on capital expenditures and mainte-

CN Rail intermodal facilities in Toronto.



Swiss Technology for Atlanta's Subway Cars

Georgia's capital Atlanta is approaching the future with ambitious plans. This was probably one of the reasons why the Metropolitan Atlanta Rapid Transit Authority (MARTA) entrusted the Société Franco-Belge de Matériel de Chemins de Fer with a $ 56 million contract for rolling stock. Franco-Belge had submitted an offer priced considerably lower than competitive quotations.
The cost reduction is primarily attributable to the Alusuisse-developed large cross section technology. In the project, about 600 tons of aluminium will be processed according to the new technique. The components are welded together using particularly streamlined working methods.
When the first 100 cars are delivered to Atlanta in the near future, this city with its special blend of international character will have become even more international through a French transportation system integrating Swiss aluminium know-how.

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ALUSUISSE

Prospective locomotive engineer behind the controls of CN Rail's locomotive simulator.

nance expenses must be directed at improving the net profit. Improvements in net profit then carry with them the responsibility of maintaining efficient facilities.

We have been as guilty as others of using capital to solve what are, in fact, maintenance problems. This is one solution to a problem but it creates a secondary one — the impact on the operating budget of interest required to carry the investment. This is not to say that judicious use of capital does not have a beneficial effect on operating expense. In the past five years we have spent $1.9 billion to allow us to handle the traffic offered at a lower unit cost and the cost savings have covered the expense of the capital invested.

Capital spending must always be measured against the question "Why?". If the traffic volumes which seem to necessitate capital plant improvement can produce sufficient net income to offset the expenditure, then we go ahead with them.

Sometimes a rate criterion might be required either to improve low-earning movements or, quite frankly, to inhibit unprofitable traffic. There is no economic sense in moving large volumes of non-profitable goods.

Training

We are also just as interested in making better use of our human and technical resources.

One of the keys to increased productivity is the training, and in many cases the retraining, of people. Our apprenticeship training programme in the crafts devoted to the repair of locomotives and cars is one of long standing and has been effective in producing craftsmen in these trades.

We have also launched a fully integrated programme this year which combines classroom and practical training through each of six levels to develop Maintenance of Way employees.

With the phasing out of firemen and helpers, it was necessary to find a new source from which to select future engineers. Employees who already had an appreciation of train and yard operations and their working conditions seemed a good place to begin. Agreements were successfully negotiated with operating labour unions and a training programme for qualified trainmen was developed. The training school is in Gimli, Manitoba, and students are taught operating rules and regulations, the function of motive power and brake systems, train handling and track/train dynamics. A locomotive simulator provides train-handling experience in a realistic on-line environment.

Then the student goes out on the road with regular engineers. And if a successful performance is achieved during this phase, the student is qualified by a Road Foreman of Engines. Since 1972, some 1,050 new engineers have qualified, with excellent results in their knowledge and ability.

Regular engineers are given a two-week refresher course on the same subjects at the Gimli Training Centre, and more than 800 of them have attended.

We are convinced that the various training steps for train-service employees have produced measurable benefits. Perhaps the most obvious is a continuing reduction in failures and accidents attributable to human error, but engineers are also displaying new understanding and respect for all equipment in their charge, and the rules and regulations governing its use.

Like most railways, we are constantly on the look-out for good management material and performance reviews for staff at all levels are taken seriously.

CN Rail track renewal train replacing rail and ties.

We believe the continued success of the railways is in the hands of managers who are well qualified technically but who are also well grounded in the realities of "bottom-line" thinking in the solution of problems.

Maintenance of Way

In the Maintenace of Way section we are stressing the priority allocation of materials. Too often there has been an over-deployment of material to cover the need and on other occasions the correct amount of material has been mis-applied in low-priority areas.

To this end we have developed a new system, in close co-operation with our management services colleagues, whose computer programming expertise has helped solve many of our problems. Called T.I.E.S. (Track Inventory and Evaluation System), it is computer-based, and contains an inventory of track components and their current condition. It will be used initially to define needs and priorities for the application of major material requirements, specifically rail, ties and ballast. As the programme develops it will be expanded to include other significant material applications, major plant components such as bridges and buildings, and even the deployment of maintenance forces.

We have also begun a programme specifically aimed at improving those conditions which contribute to premature rail wear and have scheduled additional rail grinding, welding and trowelling of remaining joints. The extra annual maintenance cost will be $4.5 million, but it will produce savings of $15 million by reducing rail replacement costs.

Other examples of cost/savings trade-offs include substitution of concrete ties for wood in areas of heavy curvature/heavy tonnage. The extra tie cost is more than offset by reduced rail wear and lower costs to maintain line and gauge. The use of welded alloy-steel rail, and of heavier weight, are other factors in the cost/savings equation.

Car Management

Car management has become much more sophisticated. Where once the aim was to have many cars in good condition to meet all demands, today the emphasis is on proper concentration on those segments of the car fleet which will produce maximum net dollar benefits.

Discussion between our marketing and car management people identifies the forecast demand for some 20 car types for each week over the next four-week period. Based on current car flows and bad-order levels we can predict short, satisfactory or surplus situations for each type of car. The impact on revenues of predicted shortages is determined by the marketing people.

A weekly Current Fleet Action report, available throughout the system, summarizes this information and during the subsequent week activities are monitored against the instructions and standards provided by the report.

We have been running this programme for more than fifteen months and, as a result, fewer cars are needed to handle the same business. Our net ton/miles increased slightly from 68.1 billion in 1976 to 69.5 billion in 1977. But we achieved this modest growth with 3,300 fewer cars on-line.

Labour

The operations function, of course, is very labour intensive — representing about seventy per cent of the total direct operating cost. The rate of progress in achieving reductions in yard and train crew sizes through negotiations with the unions has been heavily influenced by the age and service characteristics of the running trades work force. However, consistent with the restraints of labour contracts, management attention is directed at identifying action opportunities as they arise. As an example, 82 per cent of our yard assignments operate with a three-man crew. It is worth noting here that reductions in non-operating, administrative and management personnel have also been attained.

Although our productivity increases have been appreciable, with gross ton/miles up 10 per cent and running trade employment levels down six per cent, they were not achieved at the expense of service considerations. Plant maintenance and improvement programmes kept pace with traffic growth, and necessary track work was integrated more and more into train operations.

A scheduling simulator is used to examine the relationship between train operations and proposed engineering-work blocks. This gives us quick and accurate assessment of the interference element of any work programme and the downstream effect of one programme on another. The various possible combinations are considered and a plan of action determined. Under manual charting methods the turn-around time for a full transcontinental simulation used to be two to three weeks; the whole process can now be completed in one day.

We have also implemented a daily advice, via our TRACS network, of temporary slow orders, occupied sidings on single-track territory, work block time, and the number of trains operated.

We have also been active in a number of other fields. The traction effort of our GP40 fleet has been increased by about 15 per cent as the result of a better system of slip control which we have developed. We are now starting to install it on our SD-40 fleet.

We have put computers to work on our yard inventory system. They are eliminating card racks and speeding the process of logging the position of cars in yards. This produces a payback of 100 per cent.

On the perennial problem of hot boxes, our detector network has been expanded. Along with more vigilant yard inspections, this has given us one of the best hot-box records in North America. In 1977 our average mileage per hot box was 8,514,966. Every car sent off line because of a hot box is thoroughly investigated — fifty specific questions are raised — and the results are quickly passed on to operations managers.

Research

We are convinced that research will play an ever-increasing role in the efficient operation of railways. Our research facility is one of the largest on any railway in North America and has been active in many railroading fields for some years.

Researchers at CN Rail's Research Centre in Montreal inspect the first production version of a new steering type freight car truck. The steering device reduces rail and wheel wear on curves and increases stability at high speeds on tangent track.

Sometimes the solutions embraced to meet competitive pressures have themselves created problems of some dimension. Today's longer trains of larger, heavier cars pulled at ever greater speeds by more powerful locomotives have produced benefits, but they have also opened up a whole new examination of track/train dynamics.

One of our most promising developments in this area has been the production of a steering-type device for freight car trucks so they can negotiate significant curvature at equilibrium speed without flange contact. The first ten production units of this steering device were put into service in August and it is anticipated that they will dramatically reduce rail wear on lines with a high proportion of curved track.

We are also conducting extensive research into rail metallurgy to provide tougher, more wear-resistant rail. And in a programme aimed at developing a stronger, more durable track structure we have improved criteria for the selection of sub-ballast and ballast materials. Our research has involved new petrographic techniques for ballast selection and field experimentation with various ballast types.

As for the future — we will see ever greater use of computer models and testing facilities to provide quicker analyses of problems, assessments of available solutions, and recommended courses of action.

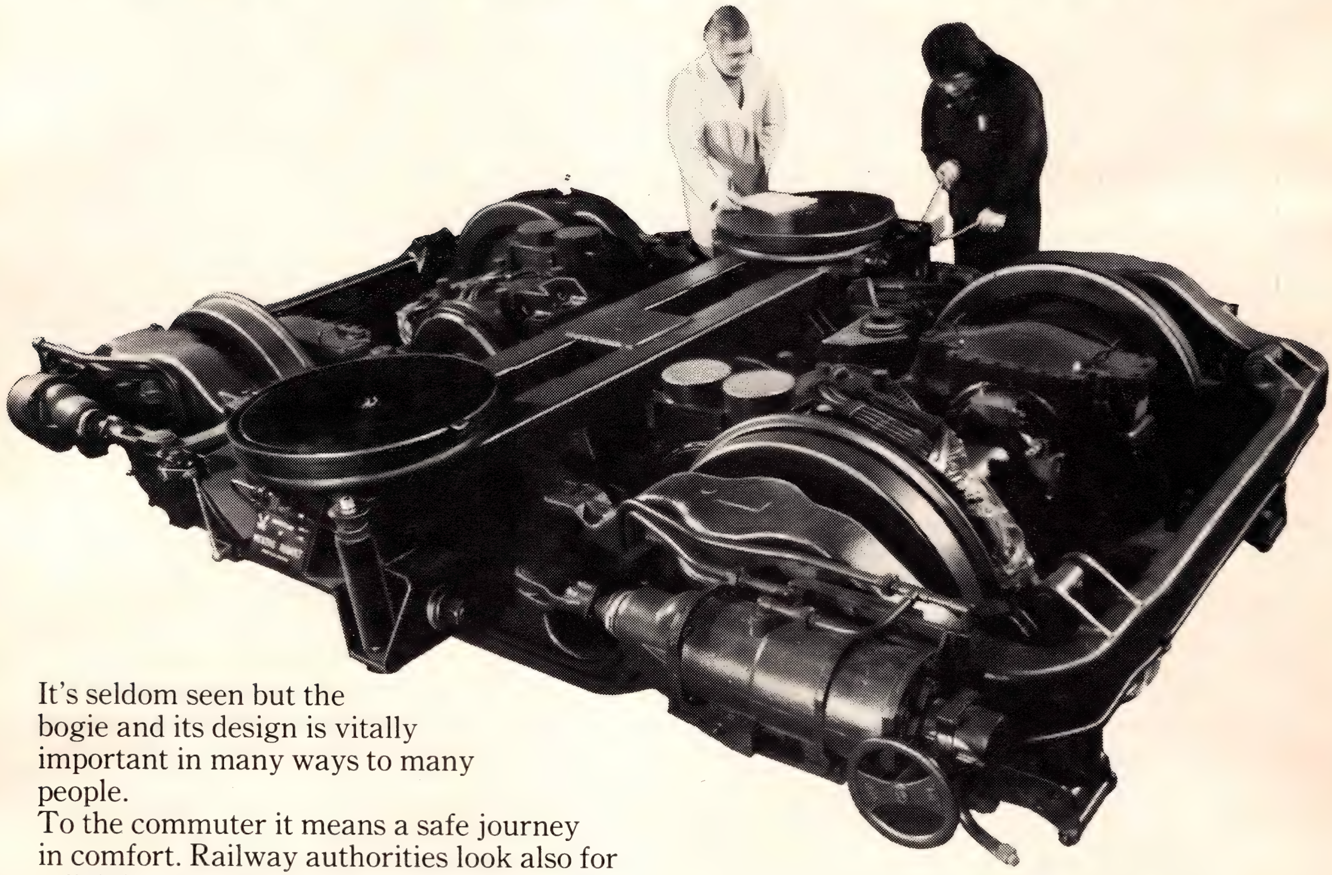
Maintenance of Way will be increasingly more sophisticated in its techniques and will require better training for all levels of employee.

We also believe that in the not too distant future it will be possible to reach agreement that the work of rear-end crews on some trains can be handled efficiently and much more economically by electronic means.

Railroaders have proved equal to the challenges of the past. They solved many of the problems facing them with the crudest of tools and by the seat of their pants. Today's demands and tomorrow's challenges will be overcome with more sophisticated tools in the hands of well-educated personnel. Managers will be schooled as much in business methods as in railway practices. And some of the present barriers to a more efficient railway system will have to be lowered. The enemy is not other railways but other transport modes.

With open-mindedness to new ideas and a willingness to embrace innovation we can look to the future with confidence.

The unseen hero.



It's seldom seen but the bogie and its design is vitally important in many ways to many people.
To the commuter it means a safe journey in comfort. Railway authorities look also for reliability, long life and low maintenance.

Early in 1979, the first of 150 double deck electric passenger cars enter service in Sydney, running on bogies that meet all these requirements. Vickers Ruwolt is manufacturing its own design of cast-steel, air suspension, trailer and motor bogies for A. Goninan & Co. Ltd., main contractors to the N.S.W. Public Transport Commission. Rely on the experts.

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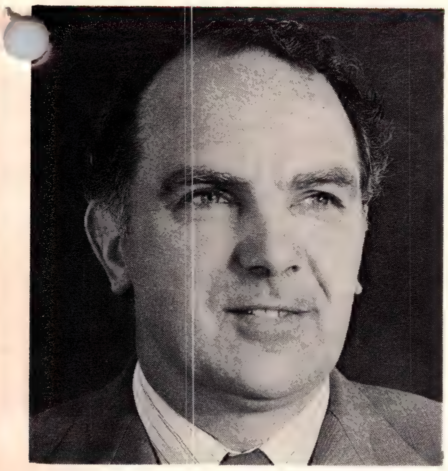
The Window Seat



Australian National Railways has appointed Mr Jack Harris as Sales Manager. He will oversee all ANR marketing developments, and direct sales staff located in Melbourne, Sydney, Perth, Launceston, Adelaide and most major SA country centres.

Mr Harris has had 28 years experience with ANR in the marketing and administration areas. He opened the ANR commercial office in Sydney in 1965, was the first full-time secretary of the Australian and New Zealand Railway Conferences in Melbourne, and, prior to his latest appointment, was Executive Officer with ANR.

The position of Sales Manager was formed as part of a new ANR organisation structure following the recent amalgamation of the former South Australian and Tasmanian Railways with ANR.

Mr Cyrus Menagh has been appointed Westrail's new Comptroller of Stores. He first joined Westrail in 1940 as a Junior Clerk with the Accounts and Audit Branch.

In 1959 he was appointed Officer-in-Charge of the Data Processing Bureau. In this position he was actively involved in the planning and implementation of the conversion of the first two Stores Branch stock sections from manual to punched-card data processing procedures.

Mr Menagh was appointed to the position of Finance Officer, Standard Gauge Project in 1965, Chief Bookkeeper in 1970 and Chief Audit Officer in 1975. He is a Fellow of the Australian Society of Accountants and a member of the Chartered Institute of Transport.

Dr Colin Gannon, 36, who had been working as First Assistant Secretary (Special Duties) within the Department of Transport on the current International and Domestic Air Transport Reviews, has been appointed Director of the Bureau of Transport Economics.

Dr Gannon had been on leave of absence since February 1978 from Monash University where he has been Associate Professor of Economics since June 1974.

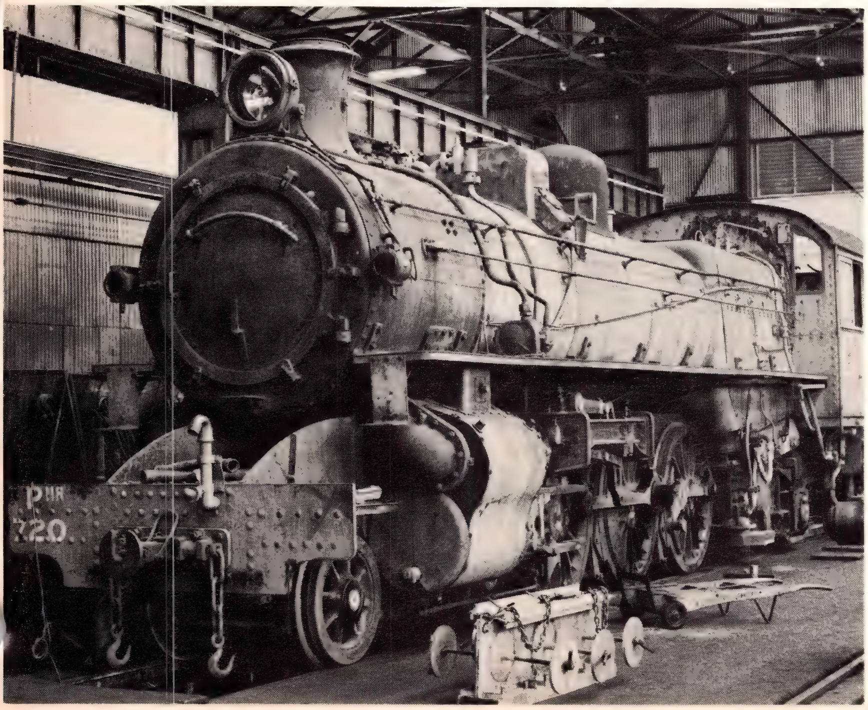
"Dr Gannon is highly qualified in the fields of mathematics, civil engineering, engineering/economic planning, regional science and economics," Mr Nixon said.

"He is particularly experienced in public policy analysis, including the economic evaluation of public investments such as transport facilities."

Dr Gannon had held several academic appointments as well as undertaking research and consultancy tasks in both the United States and Australia.

* * *

Three old steam locomotives have just been prepared at Westrail's Midland Workshops for the long journey to South Australia. Two W-class and one PMR-class (pictured) were sent by flat-top wagon from Forrestfield to Peterborough, consigned to the local Railway Preservation Society. However, a great deal more work will have to be done before these old locomotives are able to get away under their own steam.



* * *

Some 200 Australian and overseas delegates are expected to attend the Third International Rail Sleeper Conference, to be held at Lennons Plaza Hotel in Brisbane from September 23-28, 1979.

Most of the world's railway systems face track upgrading needs

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The Dortmund Horder Vacuum Degasser has now refined over 1,000,000 tonnes of liquid steel for Comsteel products, that is equivalent to 2.5 million railway wheels or 19 Sydney Harbour bridges. Comsteel are constantly researching and developing new methods of wrought wheel production. An example of this is the Vanadium enriched NUVAN wheel which has improved fracture toughness of up to 50%.

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today because of rising demand for mass rail haulage together with present-day train axle loads and speeds which exceed those for which much ack was originally designed.

Delegates to the conference — being held in Australia for the third successive occasion following successful events in Sydney in 1973 and Perth in 1976 — will include representatives of local and overseas railway systems, civil engineers, steel, concrete and timber specialists, and others interested in present and future economic management of fixed-rail systems.

Queensland Railways, through Commissioner P. J. Goldston, will be the official host system for the conference which, in addition to discussion sessions, will take in field tours and inspections. One inspection will be of the Goonyella Line in Central Queensland which moves millions of tons of coal to Hay Point for export.

Discussion subjects will range over track upgrading costs and benefits, maintenance, track effects of electrification, rail-wheel dynamics, plastics in rail track, rail fastenings, ballast and developments in steel, concrete and timber sleepers.

Conference convenor is Mr John Moss, Rail Sleeper Association (Australia), G.P.O. Box 4192, Sydney 2001, Telephone (02) 27 5651.

* * *

An agreement signed recently between the National Federation of Rail Societies and New Zealand Railways will allow carriages owned by groups in Auckland, Wellington and Dunedin to be used on excursion trains.

The carriages are ex-N.Z.R. stock, which the societies have restored using volunteer labour and their own equipment.

The trains will be available for hire to almost any destination served by rail. They will be hauled by N.Z.R. locomotives, and the running will be under full N.Z.R. control.

The scheme is a result of the continuing demand for excursion trains, a demand which, in recent years, it has not been possible to meet.

* * *

A $3.1 million contract has been awarded to the New Zealand firm of Wilkins and Davies Ltd to build the North Rangitikei and Kawhatau bridges on New Zealand Railways' Mangaweka rail deviation.

These bridges are a major part of the 8.5 km deviation, which will eliminate a very difficult and troublesome section of track between Mangaweka and Utiku, south of Taihape, on the busy North Island main trunk line.

There are three bridges in the deviation. The South Rangitikei bridge was started in 1973, but work was stopped in 1975 following the collapse of a launching girder. However, discussions are now being held with the builder, Codelfa Construction Co., and the Minister of Railways expects work to resume soon.

The letting of the contract for the remaining two bridges is a major step toward the completion of the project. New Zealand Railways expect that the deviation will be complete early in 1981.

* * *

Many of Westrail's redundant city railway buildings are being demolished to allow for street widening and landscaping of the area between Perth's new Cultural Centre and Westrail's City railway station *(see p.16 above)*.

A paved pedestrian walkway, linking City station with the MTT bus terminal, has been opened and affords safe interchange between bus and train allowing passengers to walk from one to the other beneath busy city road traffic. It also provides direct access for bus travellers to the forecourt of the railway station and adjacent Wellington Street, avoiding the busy William Street intersection.

The completion of this project is the first phase in a plan to upgrade City station.

A specially-modified truck housing the "Herald Art Exhibition" is tied down on board a flat-top wagon at Westrail's Kewdale Freight Terminal for return to Victoria by rail.

The exhibition, "The Heroic Years of Australian Painting, 1940-1965," was in Perth recently for a four-week season. It featured some of the most outstanding Australian paintings of the period, one of its special attractions being four of Sidney Nolan's famous Ned Kelly paintings. The exhibition provided a complete "Who's Who" of modern Australian painting.

The exhibition was presented by the Herald Newspapers group and the Victorian Government and was brought to Western Australia by rail in association with the WA Art Gallery.

Mrs Sue Cummings of Nedlands, Western Australia, who completed her 50th interstate train journey on 23 November, has seen a great deal of change over the years since she started rail travel in the 1920s.

"In those days train travel was more of an adventure, the trip took many days, many changes of carriages and more often than not you were covered in fine, red dust and soot from the steam locomotive. Train transport now is the most luxurious and relaxed way to travel and I hope that I am able to continue patronising interstate rail services for many years to come," Mrs Cummings added.

Mrs Cummings was given official farewells in both Sydney and Pt Pirie and on arrival in Kalgoorlie was met by Westrail District Traffic Superintendent, Kevin O'Reilly (pictured left) and Commercial Representative, Les Hackett, and presented with a floral arrangement.

She was welcomed back to Perth by Acting Passenger Superintendent Merv Smith and Public Relations Officer, Ted Wilson and presented with Westrail's latest book *On Track* as a memento for achieving the milestone of fifty interstate train trips.

A New Era for Albany

An era of overnight passenger rail transport, serving the south of the State has passed with the withdrawal from operation of Westrail's "Albany Progress", a withdrawal brought about by poor patronage and the high cost of renovation or building replacement carriages.

"Albany Progress" train will be replaced by an augmented air-conditioned motor coach service, five additional coaches being introduced to provide fifteen services a week in each direction. This schedule will be supplemented during peak periods, such as long weekends and school holidays.

Commissioner of Railways, Mr W. I. McCullough, pointed out that "Acceptance of Westrail's motor coach service can be gauged from the fact that twice the number of passengers travel by coach than by train".

The overnight rail freight service to and from Albany will continue to operate five nights a week, Monday to Friday.

Special express motor coaches to and from Albany have also been programmed for weekend passengers from December 3, stopping only at Williams, Arthur River, Kojonup and Mount Barker. These express services will cut an hour's travelling time from the present motor coach schedules.

Scottish pipers and hundreds of people, many in period costume, farewelled the final overnight "Albany Progress" passenger train from Albany Railway Station o December 1.

The twelve fully-booked carriages and two buffet cars were hauled by Albany's W Class steam locomotive "Princess Royal Express" to Elleker, where it was changed for a diesel locomotive for the journey to Perth. The train was escorted to Elleker, about 25 km from Albany, by a fleet of motor cars.

Window Seat (cont.)

Westrail recently came to the aid of a disabled European ship towed 3,700 km into Fremantle and carrying a cargo of 364 seven- and 14-metre containers bound for the Eastern States.

The 9,000-tonne container ship *Visurgis* developed mechanical trouble between South Africa and Western Australia and during a six-day wait in the Indian Ocean for a Dutch super-tug from Durban, arrangements were made to rail the ship's cargo of containers across Australia.

The direct transfer of the ship's entire cargo of containers to shore and then to rail was completed smoothly and was the first such operation handled in association with Westrail.

* * *

Westrail's interstate "Indian-Pacific" tours have become a popular feature among holiday-planners in 1978 and many travellers have selected itineraries for the second year in succession. This has encouraged Westrail to vary the itineraries for the nine departures in 1979, and to plan a completely new 16-day holiday to Tasmania, with which the interstate tour season starts on February 22.

The itinerary includes "Indian-Pacific" train travel to Sydney and a short stay at the Boulevard Hotel before flying to the "Apple Isle" for a seven-day motor-coach tour. The tour includes Launceston and the Tamer River, historic Hobart and Mount Wellington, Port Arthur's convict ruins, and Queenstown.

The return journey is also via Sydney with a brief stopover before leaving for Perth aboard "Indian-Pacific". The cost of this holiday is $1,075, with a reduction to $940 for pensioners and children.

* * *

The 14-day holidays to Sydney and Queensland have both been varied to include more motor-coach travel and allow greater flexibility for sightseeing.

Features on the Sydney tour include a visit to the Hunter Valley, with wine tasting at the Wyndham Estate, launch cruises on both Sydney Harbour and the Hawkesbury River, and coach touring of the South Coast, Canberra and the Blue Mountains. Departures are on March 8 and 29.

The Queensland 14-day holidays depart on May 10 and June 24, featuring such attractions as Seaworld, and the Currumbin Bird Sanctuary at Surfers Paradise, rain forests in the McPherson Ranges, the Sunshine Coast, Brisbane and Glass House Mountains.

Both Sydney and Queensland tours are $900 with pensioner and child rates reduced to $750.

* * *

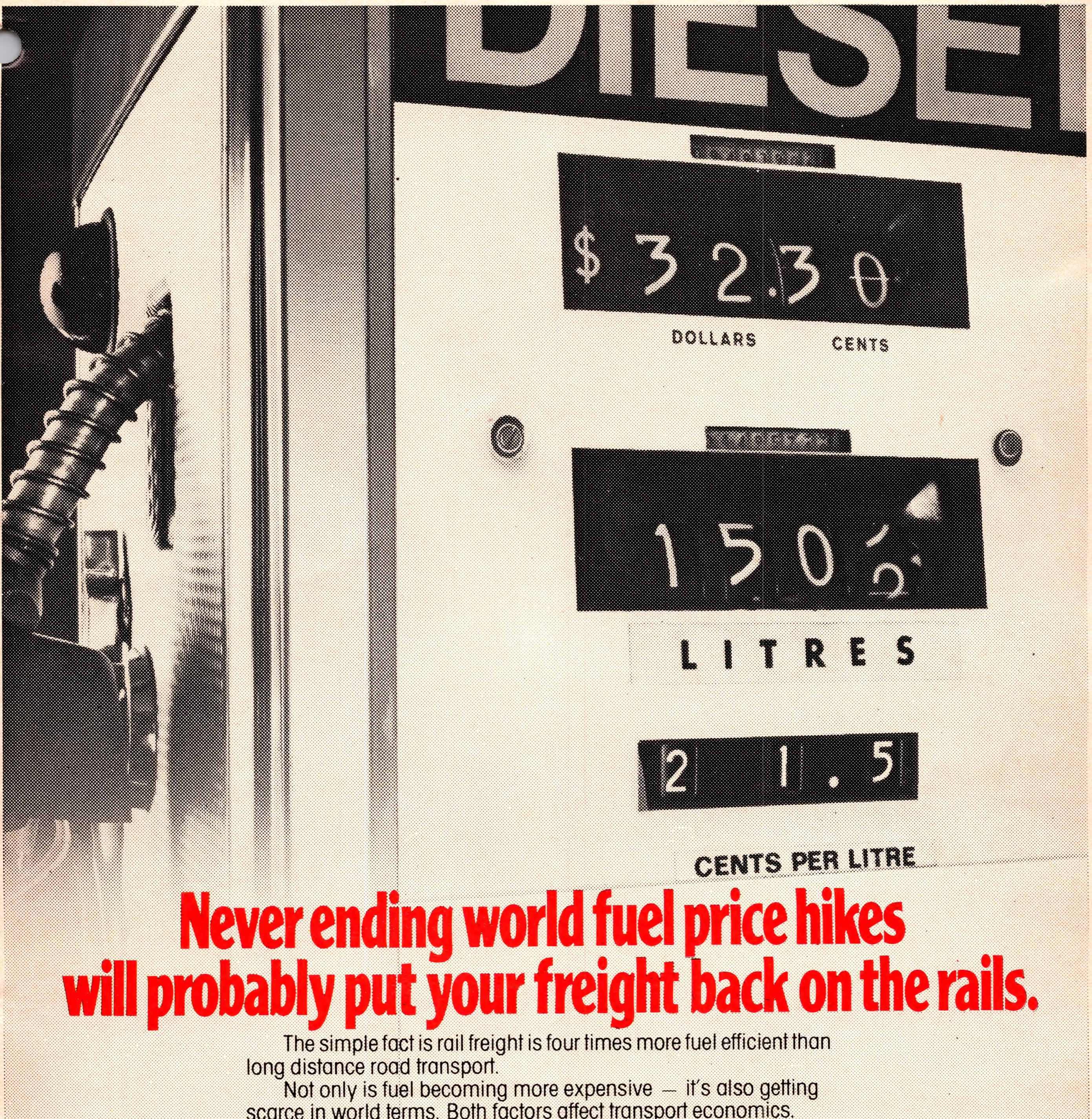
The best of the 14-day Sydney and Queensland Holidays have been incorporated into a 21-day itinerary with scheduled departure dates of April 17, May 31 and July 10. Costs are $1,250, with pensioner and child fares reduced to $1,065.

A firm favourite in 1978 has been continued in the 1979 programme of tours. This is the 17-day Adelaide/Melbourne/Sydney Holiday, with one departure on November 21. It will feature the best of Sydney, Victoria's Ballarat and Sovereign Hill, a "Puffing Billy" steam train excursion to the Dandenongs, and South Australia's Barossa Valley and Adelaide Hills. The cost is $1,085 reduced to $935 for pensioners and children.

Travellers on each of the nine holiday tours will be accompanied by Westrail's escort/entertainer Greg Sladden.

* * *

A revised *Network* subscription rate applies from this February issue. Increasing production and distribution costs have made this necessary. The new annual subscription is $8.50 per annum (posted within Australia); the overseas rate is now $11.00. These increases have been delayed as long as possible and kept to the absolute minimum.



Never ending world fuel price hikes will probably put your freight back on the rails.

The simple fact is rail freight is four times more fuel efficient than long distance road transport.

Not only is fuel becoming more expensive – it's also getting scarce in world terms. Both factors affect transport economics.

If your distribution costs are worrying you more than ever, and if you are concerned for the Australian environment, examine closely the rail alternative.

It makes sense to phone your nearest rail freight expert, and get your freight back on the rails.

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